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VOLUME 116



CARTESIAN VIEWS

Papers presented to Richard A. Watson

EDITED BY

THOMAS M. LENNON



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PREFACE

Richard A. (Red) Watson dramatically altered the philosophical scene in 1966 with the publication of *The Downfall of Cartesianism*. (Its genesis was the PhD dissertation that he wrote under the direction of Richard H. Popkin, whose personal introduction begins this volume). This first book of Watson's has shaped not only much of the rest of his philosophical career, but also much of Cartesian studies ever since. Watson set the terms of the questions themselves, focusing on resemblance, substance and other ontological issues. Moreover, he showed how it was possible to deal with such questions in a way that illuminates and is illuminated by historical context. With affection, gratitude, and respect, his colleagues here present him, and the Republic of Letters, with papers in his honor.

Many kinds of Cartesian views are treated by these papers: the views that Descartes held, views from our perspective on those views, views on Descartes held by his early critics and followers, and views that are Cartesian in outlook (not for nothing is Descartes still regarded as the father of modern philosophy.) These overlapping views provide the unity of this volume, which is enhanced by the unity of Watson's own philosophical work. Not least among Watson's contributions was his depiction of Cartesianism as a response to a set of problems within Descartes's philosophy. The Cartesians were not slavish adherents. The contributors to this volume might be viewed as standing to Watson as the Cartesians did to Descartes.

The papers fall into four groups. First are those dealing with Descartes in Holland, a locale as important as France itself in the early history of Cartesianism. Steven Nadler deals with a figure who is relatively neglected in the *Downfall*: Spinoza. Nadler argues that Spinoza's rejection of mind-body dualism was not in response to the Cartesian problems classically depicted in the *Downfall*. Rather, the rejection relates more directly to the problematic sort of personal immortality based on this dualism that, in Spinoza's view, posed an obstacle to a happy life, free of the hopes and fears grounded in superstition. Han van Ruler also deals with Spinoza, but also with Arnold Geulincx. He shows how Guelincx's linguistic idealism (metaphysical claims indicate nothing about the world, but only about our

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ways of speaking) nonetheless allowed an experiential basis for dualism. This was a theme played out in a kind of naturalism by Spinoza, who was responding to questions about the will left unanswered by Descartes and Guelincx. This naturalism enables us to see how the doctrine of the later *philosophes* came to be seen as a version of Spinozism. Finally, Watson's role as a biographer of Descartes is recalled by Theo Verbeek. We know that around the beginning of 1628 Descartes left France for Holland, where he remained for most of the rest of his life. Verbeek shows that his initial intention was not to remain permanently there. This is not a biographical detail, for in Verbeek's telling it dramatically deflates the significance for Descartes of Galileo's condemnation, for example.

Aside from the exploratory work of Popkin, the skeptic Simon Foucher was almost entirely unknown in the English-speaking world before the Downfall, and hardly better known in France. Spectacularly, Watson argued that Foucher's criticisms were responsible for the downfall of Cartesianism. José R. Maia Neto argues that, notwithstanding Foucher's criticisms of him, Descartes can be understood in terms of the Academic skepticism advocated by Foucher. The upshot is that if Foucher was responsible for the downfall of Cartesianism, it is more precisely expressed as "the breakdown of Cartesian metaphysics," as Watson's omnibus title of the second edition has it. Foucher is depicted by Leslie Armour in rather different terms, but perhaps not incompatible ones since they come from Philo of Larissa. On this view, Foucher's objections to Descartes are based on a kind of proleptic objective idealism: the sytematization of experience is never complete and never issues into anything but further systems. Finally, my own paper ascribes to Foucher a potentially decisive role in explaining why Huet was moved when he was to write and publish his Censura philosophiae cartesianae, the last nail in the Cartesian coffin.

A third group of papers deals with aspects of the systemic importance of Descartes. The brothers Alan Hausman and David Hausman show that there is a version of Descartes's deceiving demon hypothesis that anticipates Kripke's Wittgensteinian skepticism based on the rule following argument. Such skepticism impugns, perhaps fatally, the intentionality of ideas, and with it the legacy of Descartes for modern philosophy of mind. Fred Wilson also treats the topic of representation, which of course was the title of still another book by Watson. Drawing on Wittgenstien, Bergmann and Searle, Wilson supports Watson's view that any acceptable account of intentional-

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ity must be based on an isomorphism between mind and object, but one that avoids making it a primitive notion. The modern notion of science traces to Descartes, and Alison Wylie shows how Watson deploys it in his work on the social sciences, where he evidences the same ferocious attention to getting the story straight that he does in his historical work. Not incidentally, she reminds us of still another set Watson's accomplishments, viz. in things underground: archeology, geology and speleology. That the author-date system of documentation now spreading to the humanities from the natural and social sciences should appear in two of the papers in this section is thus no surprise. Finally, Alan Gabbey discusses the pitfalls of philosophical and scientific translation, including the most famous of all philosophical texts, cogito ergo sum. He thereby also highlights one more of Watson's contributions, for Watson is the translator of both La Mettrie and Foucher.

Not all was ever smooth in the spread of Cartesianism, of course, despite its undeniable success and influence. Descartes's works were the object not only of criticism, but also of attempts at censorship by the schools, the civil authorities and the church. Jean-Robert Armogathe deals with the events and documents that eventuated in the Cartesian Antoine Le Grand's *Institutio Philosophiae* being placed on the Index in 1709. The general issue of free expression is investigated by Daniel Garber, who begins with Mersenne's arguments limiting it and then turns to the attempts, unsatisfactory in his view, by Bacon, Descartes and Spinoza to answer those arguments.

Popkin's introduction of Watson in his early career is followed by a second introduction of him later as a colleague by William H. Gass, who recalls still another facet of Watson's career. For in addition to being a philosopher, an historian of philosophy, an underground scientist, Watson is a poet and novelist. Some idea of his overall production in all of these areas is given by his "short" bibliography at the end of this volume.

Thomas M. Lennon March 17, 2003

ABBREVIATIONS

AT Oeuvres de Descartes, ed. Charles Adam and Paul

Tannery (Paris: J. Vrin, 1996)

CSM(K) The Philosophical Writings of Descartes, trans. John

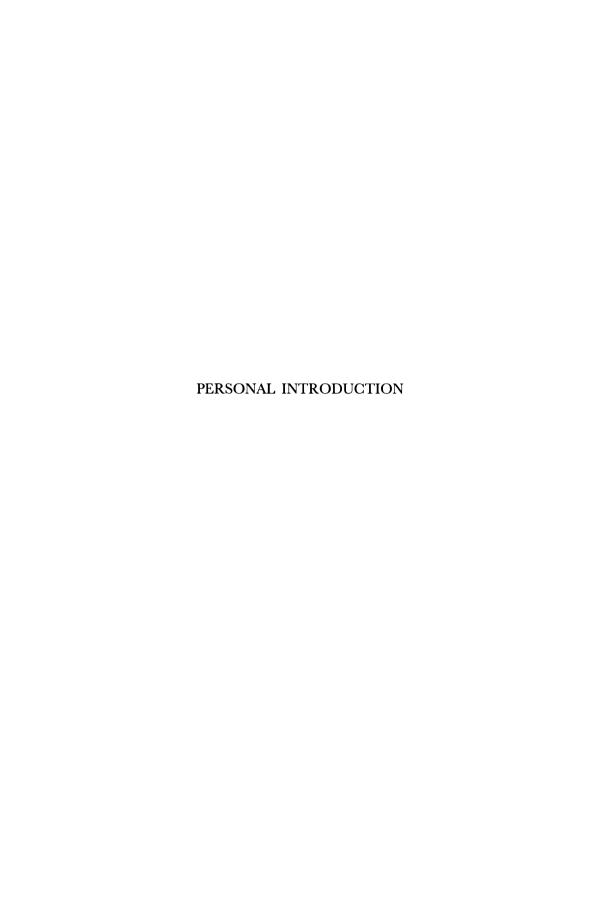
Cottingham, Robert Stoothoff, Dugald Murdoch (and Antony Kenny) (Cambridge: Cambridge Uni-

versity Press, 1985, 1993)

The Breakdown of Cartesian Metaphysics (Atlantic Hylands:

Humanities Press, 1987), which reprints The Downfall

of Cartesianism



RED AS RESEARCH ASSISTANT

Richard H. Popkin

Professor emeritus: Washington University, St. Louis and University of California, Los Angeles

I'm not sure exactly when Richard A. Watson became my graduate assistant at the University of Iowa. It seems to me that I first came in contact with him around 1952 when he was a teaching assistant for an interdisciplinary humanities course that I taught with Victor Harris in the English department. I cannot recall what Red's function was in the course. After the academic year 1951-2, I went off to Paris on a Fulbright grant and Red went into the Air Force. We both returned to Iowa in 1954 and it is around then that he became my research assistant. The University of Iowa at that time was quite generous about support for research assistants. Maybe it was because the philosophy department did not need teaching assistants. For elitist reasons they did not give lower division courses and had only one or two courses that needed any student help. So, even when I was a brash, new assistant professor at Iowa I had a research assistant in 1948. Red was probably the third or fourth one. I think he had earned an MA in philosophy working with Robert Turnbull on the theory of perception in Thomas Reid. The university, besides being generous in its support of graduate students, was also quite generous in giving us small teaching loads so I had much more time for research than is usual for young professors.

The period when Red came into my life was one when I was working out the overall theory about the role of scepticism in modern philosophy. I had started with a fairly simple theory that appears in my three-part article "The History of Scepticism and the Rise of Modern Philosophy" (*Review of Metaphysics*, 1952–3). The material I gathered in France in 1952–3 and in Berkeley in 1953–4 now had to be incorporated into a much larger and more intricate theory.

Besides the intellectual work that was to be done, with Watson's assistance, there was a difficult menial task. In France I discovered almost immediately that the cost of notepaper was absurdly high, especially to one used to using university notepads. So I economized

by writing miniscule script, two lines to each line. I continued this until we got back to Iowa and Red had the pleasure, or displeasure, of trying to make notes out of this and to type material I had copied. By now I cannot read the notes at all and hope that Red did enough of them for future scholars. It was a frequent sight to find him in my office pounding away at an old typewriter. He was a demon typist who could pound out the material at a very fast and accurate rate and include all the accents. More intricate materials were given to him. When I returned from a summer in Paris in 1956, where I had started working on the notes and underlinings of Bishop Pierre-Daniel Huet in his books and manuscripts in the Bibliothèque Nationale, I gave my notes to Watson to type up and we have lots and lots of those and more were gathered in 1957 when I went to the University of Utrecht.

Perhaps more than the physical assistance that Red gave me was the interchange in the sense of excitement that came out of his own immersion in these materials. At that point, the Iowa philosophy department was housed behind the stacks of open shelves in the library. I would come in and find Red in fierce discussion with Harry Bracken and Phil Cummins about various philosophical texts and ideas. None of them had the slightest idea of how the French language was pronounced, so it was always a shock to try and figure out what they were talking about. It was wonderful to realize that no matter how much they butchered the pronunciation of the language, they sharpened each other's skills in dealing with the philosophical problems involved.

Along with the sound of these discussions we also had the blaring of the Iowa Marching Band, which practiced next to the philosophy office. Often we adjourned when the music got too loud and went to the library's faculty lounge, which was probably designed for sedate scholars to have a cup of tea and read a magazine. Instead, it was often the scene of ardent discussions about early seventeenth-century skepticism, in which we got some of the scholars in other departments involved. I suspect, if anyone is interested in working out the history of the development of my theory or Watson's, that there is much to be discovered in the notes. He has recently told me that he also has verbatim notes for a course I was giving at the time, and he has passed on to me a box of letters that we exchanged from the middle 1950s onward.

I think Red's interest in sceptical problems about Descartes grew out of, or gained new force from, the material he was typing for me. I wrote an article about Simon Foucher's criticism of Descartes's theory of primary and secondary qualities. This appeared in French in Dix-Septième Siècle. It may well be that Red typed this up, as well as the reams of notes I had about people who argued with the Abbé Foucher. At any rate, he became extremely interested in some of the points that Foucher had made and this became the focus of his doctoral dissertation.

Red was not only excited by the sceptical material against Descartes, but also became an active polemicist about it, arguing with some of the other graduate students. Red has told me that he typed the original manuscript of my work, *The History of Scepticism from Erasmus to Descartes*. This must have been in the late 1950s. I hope to come across the manuscript now that I am gathering up my papers to donate to the Clark Library and will be able to tell if it is a Watson effort.

It must be around this time that the late Gregor Sebba came into my life. Somebody sent me a mimeograph copy of the absolutely enormous critical bibliography of writings about Descartes that Sebba had compiled. Red, I think, was one of the first to have access to this. before Paul Dibon and I published it. Red became personally involved with Sebba and played a most important role in dealing with his materials that were left at the time of his death. Sebba had been a victim of political persecution in Vienna and then a refugee from the Nazis. He never, as far as I know, quite finished an academic program that he could transfer to the US. As a result, he had a fair amount of difficulty getting a position in the US and, finally, landed one in the business school of the University of Georgia. His class in economics there was really about the bibliography of Descartes. In his latter years he was brought to Emory University where he became a star in their institute for liberal arts. He was immensely erudite but had difficulty organizing all the materials he collected. I do not recall at what stage Red got involved with him, but I remember that at the time of his death Red rushed to Atlanta and went through the papers to find publishable materials. A small volume of Sebba's analysis of Descartes's dream was a result, as well as a piece by Sebba on the nature of historical research in philosophy, a comment on something I had written. These two important papers formed one of the early books in the Journal of the History of Philosophy monographs that Red and I instituted.

I went back to Paris in the summer of 1956 to work in the Bibliothèque Nationale and in 1957-8, as a Fulbright scholar, I went to the University of Utrecht in the Netherlands. When I was back in Iowa I would tell the students who were working with me about the

horrendous problems of trying to do research at the Bibliothèque Nationale; problems compounded by the language barrier, the unfinished cataloging, the lack of heat and light, and the absence of toilet paper. I think Red was the first of my students to venture to the library in Paris by himself. We have the marvelous account he has given us of his first entrance to the Bibliothèque Nationale in his work The Philosopher's Demise. He tells us of his initial attempt to explain to the librarian in charge of accepting orders what books he wanted. She, who had probably tested her hostility on American scholars mangling the French language, put him through a torture test, making him pronounce each word louder and louder, embarrassing him before the three hundred odd readers in the great reading room, making him feel that she thought he was an idiot if he could not master French and she did not know how he could read French if he did not understand the language. He tells us that he had to go through this routine with her many times. One has to admire his courage in persisting and in getting to the rich source material he wanted. Later on, I think in 1987, when he tried to give a lecture in French at a Paris congress about Descartes, all his efforts to come to terms with the French language failed, but somehow, as other authors in this volume can attest, Red became an active participant in the French historical scene among those interested in Descartes.

Red obviously found a niche in the French world. His interest in caving and cave exploring got him in contact with his French counterparts. The Cartesian scholars were amazed at the speleological side of Red's interest. As I recall, Paul Dibon and Elisabeth Labrousse enjoyed getting to know Red and appreciated the wide variety of his interests. They and others must have brushed aside his murderous pronunciation of their language in favor of developing intellectual fellowship with him. The new generation of French scholars were more open to other approaches and other points of view. They might have found Americans like Red lacking some of the enormous background of French scholars but having originality that opened new doors to solving problems. He played a part in creating a new sort of republic of letters on both sides of the Atlantic, which is flourishing now. He fitted in with the breaking of the molds that was occurring in French intellectual society in the post-war years as various American cultural patterns were taken up and various French formal patterns were dropped.

RED AS COLLEAGUE

William H. Gass Washington University, St. Louis

In 1969, when my wife Mary and I were arranging our lives so that we could come to St. Louis and Washington University, we asked Richard Watson, a man we had met on previous visits, to help us find quarters for our first year while we looked around for a permanent place. And indeed he did select something, which, when we finally arrived, we immediately inspected. We saw a sink and found a fridge but otherwise there seemed to be no kitchen. Later, when we learned that Red had lived in caves and put up tents in Turkey, we guessed he just cooked in the open and ate out of tin pots. We were partly right: he could do that. We finally settled for an apartment so leaky all our furniture had to be piled up against its north wall. The winter wind was demonically inspired. Two doors down (there were doors) lived a little boy who lit leaves. He set fires the whole fall. The apartment was miles away, too, whereas Red's suggestion was but a walk to school. We had a kitchen but cooked in gloves and were roped against the gale. The lesson we learned was that Red's ideas were only half-odd. Which was the not odd side was not always apparent.

Later, after we had purchased the house we still live in, an older child, also two houses away, took up the torch, but it was his own garage he set fire to. Science loves such slightly askew symmetries.

Red had various ideas about food we understood in time. He liked to live off the land, and as simply as possible, so he gardened a little, shopped in immigrant enclaves for brans from Bulgaria and geese conveniently preshot; otherwise he scavenged nuts and seeds from local trees, mushrooms from nearby forests, and fruits from abutting back yards. He hunted squirrels and rabbits, too, in his younger days. I have been told by an authority unimpeachable herself that Red and Jerry Schiller would clamber over roofs in pursuit of pigeons whose nasty necks they would on-the-spot wring and whose dubious bodies they would subsequently eat. For these feats I was full of admiration. For Mary the feeling was more one of hopeful disbelief.

In tandem with Red's culinary interest was his passion for fitness:

he paid attention to his diet, he walked, he ran, he caved. That's why he can still walk, run, cave. But he does them not simply to stay alive—to be the last man standing. He does them because it keeps him in charge of his body (shouldn't everybody be?). In the same way, we should manage our minds, ridding them of ratty metaphysical deposits or decay caused by sucking on theology's sweets. Decide. Do. It's done. Willpower solves the mind/body problem.

Consequently, Red has energy. He could fuel trucks. His curiosity is unflagging. He attends affairs, he goes to talks, he listens to readings. He teaches, yes. But he also learns. He writes, yes. But he also reads. And he lets you see and share his enthusiasms. Even if one of them is for science fiction and another for books by nuts who sail solo around the world. Because Red is an evangelist for literature. He saves texts from neglect. Out of poor neighborhoods he rescues them: from Book Fair tables, Good Will shelves, library sales, and Salvation Army bins. Red is a quiet philanthropist. He gives books away. To me. He knows me for a miser, an idolater, a word rat. But he bears in his head a list of needy folk for whom this or that book must be bought. Indeed, he has been known to purchase multiple copies. I suspect that Red has left books to grow like apple-seeded trees over half the country. Libraries take root behind him. Few better things can be said of any man.

Red collects obsessions. If he woke one morning without one, he would steal yours. Obsessions are a necessary means of production. And his books are about or express or confirm his obsessions. The Runner is a perfect example. And so is his prose. Which declares itself and moves resolutely forward. The principal obsession that Red has disclosed to me has to do with his career in literature: a career he has bravely pursued even when colleagues pooh-poohed the idea, editors and publishers rejected his work, and agents drank themselves to sleep instead of supporting his cause. Over and over, books like The Philosopher's Diet were turned away with flowery excuses and evasive lies. But Red persisted and, of course, when, almost by accident, the Diet appeared, it was a wonderful success. And now Descartes is doing the same thing, something Red does better than anyone I know.

It's some time ago, now, but once, when Red gave a reading, I had the pleasure of introducing him. I think what I said then, is still appropriate now. Here it is, as it was:

Introduction for Red Watson's Reading, Nov. 12, 1993

I have half-a-dozen introductions here, but I cannot decide which one to read. I could do the one which brings before you Professor Richard Watson, the author of Writing Philosophy and The Philosopher's Joke, the well-known authority on Descartes and other arcane matters, and a long-time teacher in Washington University's Philosophy Department, where he specializes in bullying his colleagues into demanding that the library buy more books. Speaking of books, there is, of course, Watson the Good Will scrounge, the only man in St. Louis I fear on Book Fair week, who will buy any book under 25 cents, though not, I must admit, for himself, but to give away to friends: books like the Price Guide to Leather Water-Bottles, Sahara Ski Trails, or Vocal Cord Diseases in Swiss Yodelers. Red is an omnivorous reader, but also a wise judge, and one of the few people whose literary recommendations should be heeded rather than fled from.

Then there is Iowa Rocky, the geologist and anthropological adventurer who has been on digs in New Mexico, Iran, Turkey, and the Yukon, and who could talk to us this evening on how to be your own man without interfering with your wife's career. It is, however, a subject of little interest to most of us.

In that connection, though (having some relation to rocks), I could, in a manner of speaking, pave the way for the cave explorer, Rick Watson, a world-renowned speleologist, one of the leaders of the successful expedition to discover a connection between Kentucky's two great cave systems, Mammoth and Flint Ridge, and a co-author of *The Longest Cave*, a wholly engrossing account of that achievement. Watson is presently one of the principal spirits behind the creation of a National Speleologist's Museum in Kentucky near Mammoth Cave National Park. His lecture on confronting the rabid albino bat is hair-raising indeed. After the reading there will be a reception in the new quarters of the International Writers Center. It will be held largely in the Richard Watson Room, a place you will recognize immediately as appropriately his.

Red has been a ecological consultant for our government, a specialist, in particular, on low-energy communities, on conservation and recycling, on how to get society to lose weight, and is the coauthor, with his wife, Patti Jo, of Man and Nature: an Anthropological Essay in Human Ecology.

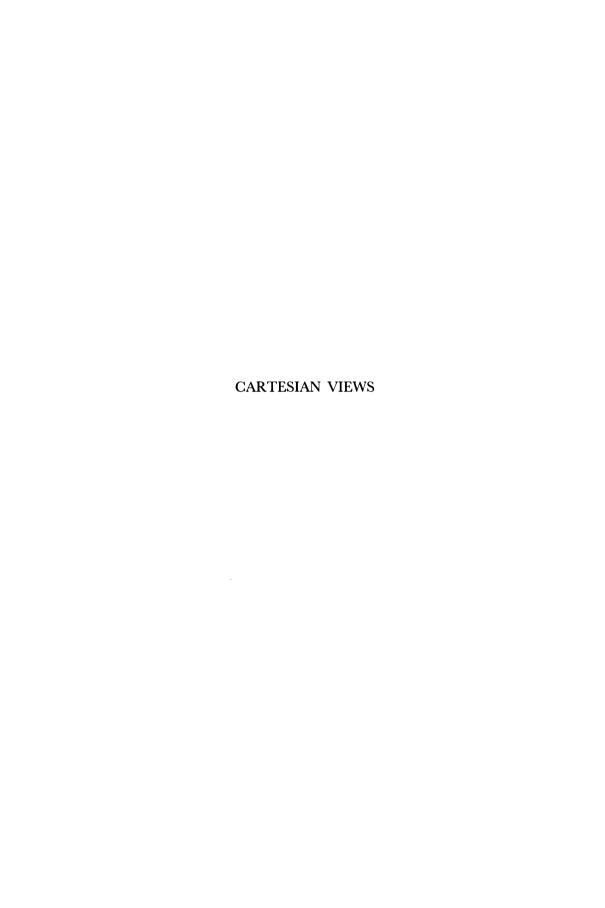
So I could introduce to you Dr. Watson, an authority, if not on what ails you, certainly on what's good for you, and the author of *The Philosopher's Diet*, a book full of distressingly sound advice of the hard-headed, common-sense sort no one wants to follow. There are crawl ways in caves so narrow that you have to exhale in order to make your chest small enough to wriggle through them, and this book will enable you to become skinny as Minnie, and do that if you are dumb enough to want to.

However, I understand that we are here this evening to listen to Red Watson the writer. Nevertheless, I do not expect we shall hear from him as the composer of wonderfully simple and inventive children's books, of scurrilous satires, of brief pieces of poetry, but as one who has taken up the most daring and dangerous and demanding task of all: writing the novel, a feat he has performed three times (to public knowledge). His first fiction was called *Under Ploughman's Floor*, plainly based on his experiences underground, a work which asks a good question: why the hell am I down here in the dirt beneath the earth if not to greet the worms in my future?

His second novel was clearly the product of its author's interest in jogging, dieting, self-discipline, and keeping fit. It is called *The Runner*, and asks the very reasonable question: why am I going round and round out here on top of the ground only to arrive at a destination deep inside where the worms of the soul reside? If Red's first novel was slightly marred by hauling no blurb from me on its dust jacket, that was remedied with the second, though the publishers wouldn't allot me much space. His latest novel, truly a triumph, and from which he will read tonight, is called *Niagara*. It is about falling, if by falling you mean failing, and is therefore really about writing as if it were walking on a wire, and asks the question: why the hell am I up here swaying on a string above a faucet full of water when I could be down in a wet hole on my belly in the suffocating dark?

This novel is graced, I might add, by one of my more accurate, honest, and better blurbs, alone worth the price of the book.

So now I know who I'm here to introduce, my old and admirable friend and writing colleague, a true polymath and wire walker extraordinaire, Red Watson.



SPINOZA AND THE DOWNFALL OF CARTESIANISM

Steven Nadler University of Wisconsin-Madison

It gives me great personal pleasure to write this essay in honor of Richard A. ("Red") Watson. He has been an important teacher and mentor to me, as well as an extraordinary friend. It was because of him that my philosophical interests turned initially to early modern philosophy, and especially seventeenth-century Cartesian philosophy. His book, *The Downfall of Cartesianism*, now a classic in the field, showed me what good history of philosophy can do—how a simple narrative about one or two well-selected philosophical problems looked at in their historico-philosophical context and with the biographical setting of the personalities debating them can come alive like a mystery novel.

Red loves a good fight, and so I am sure that he will approve heartily of what I am doing in this essay, namely, disagreeing with him. I know that he would be the first to concur that *The Downfall of Cartesianism*, as groundbreaking a study as it is—and who in the early 1960s would have thought to write an extended essay on Malebranche and Foucher?—represents in some important aspects an oversimplification. I want to look at just one of those apects.

Although he had a very large role to play in the fortunes of Cartesianism in the seventeenth-century, very little of *Downfall* is devoted to Spinoza. There is good reason for this, since, as Watson notes, he lies "outside the direct line" of the study.¹ But what *is* said of Spinoza and his role in addressing certain problems bequeathed by the Cartesian system is, I argue, misleading. In particular, it is misleading about both Spinoza's attitude towards Descartes's philosophy and his motivation for rejecting the mind-body dualism that is its central metaphysical feature.

¹ Richard A. Watson, *The Breakdown of Cartesian Metaphysics* (Atlantic Highlands: Humanities Press, 1987), 56. This book contains, among other things, a reprint of the entire 1966 book, *The Downfall of Cartesianism* (The Hague: Martinus Nijhoff).

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Spinoza was not a Cartesian. Yes, he did compose history's most famous exposition of Cartesian principles, his Descartes's Principles of Philosophy, which appeared in 1663. This was the only work that he published under his own name in his lifetime, and (until the stunning publication of the Theological-Political Treatise in 1670) it was responsible for his public reputation. And yes, this book was the inspiration for much of the Cartesian activity in Amsterdam and elsewhere in the 1660s. But today we are far from the simplistic picture—so popular in textbook histories of early modern philosophy—of Spinoza as nothing but a more extreme (or more consistent) Cartesian, as someone who simply took Descartes's principles to their ultimate logical conclusion.² Spinoza had his own philosophical agenda. He may have been first inspired to philosophy by Descartes; and he may have used Cartesian principles to further that agenda. But I am essentially in agreement with Wiep Van Bunge when he insists that we should not think of Spinoza "as the philosopher who somehow 'completed' Cartesianism, but rather as the one who destroyed some of its basic tenets."3

As anyone who has ever taken a course in the history of modern philosophy knows, one of the "basic tenets" of Descartes' philosophy that Spinoza rejected was mind-body dualism. Rather than thinking of the human mind and the human body as Descartes did, that is, as two distinct substances, radically different in nature and ontologically independent of each other, Spinoza insisted that the human mind and the human body are, in fact, two modal expressions of the same underlying reality. Their metaphysical identity goes much deeper than their manifest differences. They are, in fact, one and the same thing. The human mind is, in essence, nothing but the idea or the correlate in Thought of the human body.

But why exactly did Spinoza reject Descartes's substance dualism of mind and body and replace it with his own monistic picture? What moved him to deny perhaps the most important principle in all of Descartes's philosophy?

² Watson himself treads close to this picture when he says that Spinoza's "system is in large part a development of the implications of Cartesianism" (*Breakdown*, 117).

³ Wiep van Bunge, From Stevin to Spinoza: An Essay on Philosophy in the Seventeenth-Century Dutch Republic (Leiden: Brill, 2001), 122.

Let me begin with a brief excursion into Spinoza's metaphysical conception of the mind. Of the infinite attributes of God or Nature, two are known: Thought and Extension. These are the most general natures of things. The particular modes of Extension—that is, its specific manifestations or instantiations—are material bodies. The particular modes of Thought are called "ideas". The realm of Thought and the realm of Extension are ontologically distinct and causally closed systems; bodies causally interact only with bodies, and ideas or events in the realm of Thought causally interact only with other ideas.4 So there is indeed a kind of categorical dualism in Spinoza's metaphysics. Nonetheless, despite this separation between bodies and ideas, there is still the underlying unity in Nature stemming from the fact that these two realms are attributes of one and the same infinite substance. Thus, there is a correlation and correspondence between bodies and ideas, since each system is simply a specific manifestation under one attribute of a more primordial unity. As Spinoza says, "a mode of extension and the idea of that mode are one and the same thing, but expressed in two ways" (IIp7s: G II, 90/C 451).

One kind of extended body, however, is significantly more complex than any others in its composition and in its dispositions to act and be acted upon. That complexity is reflected in its corresponding idea. The body in question is the human body; and its corresponding idea is the human mind or soul.

IIp11: The first thing that constitutes the actual being of a human mind is the idea of a singular thing which actually exists. (G II, 94/C 456)

IIp13: The object of the idea constituting the human mind is the body, or a certain mode of extension which actually exists, and nothing else. (G II, 96/C 457)

The human body, like any other body, is a particular parcel of extension (or mode of Extension). It is a specific ratio of motion and rest among material parts that constitutes a relatively stable collection,

⁺ Ethics IIp6. All references, unless otherwise noted, are to the Ethics, and will be simply by Part, proposition (p), demonstration (d), scholium (s) and corollary (c). The standard edition of Spinoza's writings is Carl Gebhardt (ed.), Spinoza Opera, 5 vols. (Heidelberg: Carl Winters, 1972, 1987 [1925]), abbreviated as G. The translations are from Edwin Curley, The Collected Works of Spinoza, vol. 1 (Princeton: Princeton University Press, 1984), abbreviated as C.

related in space and time to other relatively stable collections of material parts.⁵ And for the human body, as for any body in nature, there is a corresponding mode of (or expression within) Thought (that is, an idea). This corresponding idea is the human mind.

Spinoza thus rejects some of the most basic elements of Descartes's conception of the mind. Spinoza's mind is most definitely not a substance, nor does it have the requisite ontological independence from the body. It is, like any other idea, simply one particular mode of God's attribute, Thought. It is the expression in Thought of the human body, which is a particular mode of the other attribute, Extension.⁶

Now since the mind just is the expression in Thought of the body in Extension, it follows that every aspect of the body has a corresponding aspect in the mind. Whatever is true of or happens in the body is necessarily reflected or expressed in the mind. More particularly, every event or effect in the body is represented by an "idea" in the mind. In this way, the mind perceives, more or less obscurely, what is taking place in its body. This is true for *all* affections—both passive and active—of the body. Not all of these perceptions are at a conscious level, of course, but they are nonetheless a part of the makeup of the human mind.

IIp12: Whatever happens in the object of the idea constituting the human mind must be perceived by the human mind, or, there will necessarily be an idea of that thing in the mind; i.e., if the object of the idea constituting a human mind is a body, nothing can happen in that body which is not perceived by the mind. (G II, 95/C 456-7)

Through its body's interactions with other bodies, and particularly the effects those bodies have in the human body, the mind is also aware of (or represents) what is happening in the physical world around it. But the human mind no more interacts with its body than any mode of Thought interacts with a mode of Extension.

Spinoza's account of the nature of the human mind grounds it deeply in the nature of the human body.⁷ The richness of activity

⁵ IVp39.

⁶ At an earlier stage in his thought, however, Spinoza seems to have been thinking that the mode of Thought that is the mind and the mode of Extension that is the body were distinct from each other; see the *Short Treatise on God, Man and His Well-Being*, Appendix II: G I, 118, line 31/C 154.

⁷ This has led Edwin Curley to claim that Spinoza's view on the nature of the mind is a kind of "materialism"; see *Behind the Geometrical Method* (Princeton: Princeton University Press, 1988), 74–8.

and capacity of the human mind is a function of the greatness of structure and aptitude of the human body.

IIp13s: In proportion as a body is more capable than others of doing many things at once, or being acted on in many ways at once, so its mind is more capable than others of perceiving many things at once. And in proportion as the actions of a body depend more on itself alone, and as other bodies concur with it less in acting, so its mind is more capable of understanding distinctly. And from these [truths] we can know the excellence of one mind over the others. (G II, 97/C 458)

IIp14: The human mind is capable of perceiving a great many things, and is the more capable, the more its body can be disposed in a great many ways. (G II, 103/C 462)

Indeed, as propositions eleven and thirteen from Part Two, cited above, indicate, the *existence* of the human mind depends on the existence of the human body. There is a fundamental unity in these two aspects of a human being. Spinoza may be a dualist when it comes to the natures of things, but it is not a dualism that gives the human mind any kind of ontological autonomy.

Ш

The same textbooks that tell us that Spinoza represents the culmination of Cartesian philosophy also tell us that the reason why he rejected mind-body dualism was because of a fundamental inconsistency at the heart of the Cartesian picture of a human being. Spinoza substituted his own conception of the human mind for the orthodox Cartesian soul as an independent thinking substance because substance dualism rules out, or at least makes extremely problematic, any kind of intelligible understanding of causal interaction between mind and body. Given the radical difference in nature between extended bodily substance and unextended thinking substance, the argument goes, there is no way of explaining how these two constituents of a human being might causally engage each other and thus no way of explaining the evident correlation between states of the mind and states of the body. Something has to go: either the dualism or the interaction. Spinoza, according to the story, drops both. By making the mind and the body not two distinct substances, but rather two modes of one and the same substance; and by ruling out causal interaction between them, and offering instead a theory of mind-body correlation that relies on mutual expression—a mental state being nothing other than the expression in Thought of exactly the same thing that expresses itself as a bodily state in Extension—Spinoza, on this reading, does an end-run around the difficulty. Spinoza's retreat to his own idiosyncratic conception of the human mind and its relationship to the body, in other words, is taken to be a response to the classic mind-body problem.

This way of reading Spinoza's rejection of Descartes's conception of the mind is not limited to textbooks. For a time, it was also standard fare in the scholarly literature, including The Downfall of Cartesianism. Watson notes that Spinoza's "monism" is "in large part a development of the implications of Cartesianism . . . [he] can be seen as giving a monistic solution to Cartesian problems", in particular, the problem concerning interaction between unlike substances.8 It is, on Watson's reading, an adjustment in the system to save the system. (A more cynical commentator, writing at around the same time in this country, would have suggested that one has to destroy the system in order to save it.) According to Watson's way of putting it, the difficulty within Cartesianism stems from a clash between three principles, one ontological and two causal. The ontological principle is (a) "There is a dualism of two created substances that differ in essence: mind is thinking; matter is extension". The causal principles are (b) "There is causal interaction between mind and matter", and (c) "There must be an essential likeness between a cause and its effect."9 Now there has been a good deal of debate over whether (c), the so-called "causal likeness principle", is, in fact, a bona fide Cartesian principle, either in Descartes or among other Cartesians. 10 Be that as it may, it is, without a doubt, a principle that Spinoza accepts. In Part One of the Ethics, proposition three explicitly states that "if things have nothing in common with one another, one of them cannot be the cause of the other". But Spinoza clearly rejects (a) and (b), just because, Watson suggests, of his commitment to (c). Thus, Watson tells us, Spinoza's revision in the conception of the mind and its relationship to the body stem from a worry about interaction in a dualist system. 11

⁸ Watson, Breakdown, 117.

⁹ Watson, Breakdown, 51.

¹⁰ See, for example, Eileen O'Neill, "Mind-Body Interaction and Metaphysical Consistency: A Defense of Descartes", Journal of the History of Philosophy 25(1987): 227–45.

Another scholar, while muting the connection with Descartes, nonetheless notes that mind-body interaction was one of "the two biggest problems that Spinoza's

Now I do not wish to assert that concerns over mind-body interaction, and especially problems raised by Descartes's account of the mind, played no role in Spinoza's rejection of that account and in the development of his own metaphysics of the mind. However, it is not, I think, the most important part of the story.

Another approach to the question of why Spinoza abandoned Descartes's conception of mind also has him trying to salvage an essentially Cartesian system by responding to an internal tension generated by mind-body dualism. This time, however, the tension is not between the doctrine of dualism and the question of mind-body interaction, but rather between dualism and the question of the unity of the person. Spinoza, on this view, rejects substance dualism and Descartes's concomitant conception of the mind because if the mind is indeed a substance distinct from the body, then it is hard to see how they can together form a true union that is a person. Thus, Edwin Curley insists that Spinoza "is responding to the tension . . . between the Cartesian doctrine of real distinction and the Cartesian doctrine of substantial union". On the one hand, Descartes says that the mind (and, thus, consciousness) is an ontologically distinct substance from the body. On the other hand, as Curley puts it, "I take a very personal interest in my body . . . I and my body are one. That is why I have the concern for it that I do and why I have the awareness of it that I have." How is the intimate relationship between mind and body possible? This is, according to Curley, "the question that lies at the heart of Spinoza's theory of mind-body identity." It is, he insists, "more important in the genesis of the Spinozistic position than any concerns about the intelligibility of interaction between distinct substances."12 Spinoza, by making the mind the idea of the body, has again short-circuited the problem. No longer is it a matter of bringing together into a union two distinct substances. Rather, the unity is what is metaphysically prior. Mind and body are simply two distinct expressions, under different attributes, Thought and Extension, of one and the same thing. As Spinoza says at IIp21s,

The mind and the body are one and the same individual, which is conceived now under the attribute of thought, now under the attribute of extension. (G II, 109/C 467)

metaphysic was meant to solve"; see Jonathan Bennett, A Study of Spinoza's Ethics (Indianapolis: Hackett Publishing, 1996), 62-3.

¹² Curley, Behind the Geometrical Method, 59-62.

One way of putting this is to say that for Spinoza, the unity and identity of the person, rather than resulting from the coming together of two substances, comes *before* the distinction between mind and body.

Now I am very much in agreement with Curley's belief that this question of saving personal identity or the substantial union of the person played a role in the genesis of Spinoza's anti-Cartesian conception of the mind and its relationship to the body. And yet, as I said in the case of the interaction problem, this issue, too, must take a back seat to an even more important question—one which, I believe, played *the* crucial role in Spinoza's rejection of Descartes's substance dualism.

IV

Descartes prided himself on the felicitous consequences of his philosophy for religion. In particular, he believed that by so separating the mind from the corruptible body, his radical dualism offered the best possible defense of and explanation for the immortality of the soul. In the Letter to the Sorbonne that accompanies the Meditations on First Philosophy, Descartes explicitly says that one of his aims in the book is to combat those who would deny the immortality of the soul and to take up the call to arms to demonstratively establish the truth of that doctrine.¹³ Disappointingly, Descartes does not explicitly offer any full demonstration for the immortality of the soul in the Meditations themselves. The Synopsis that prefaces the work indicates that Descartes believes that the immortality of the soul follows immediately from the real distinction between mind and body. But he says that while these arguments "are enough to show that the decay of the body does not imply the destruction of the mind, and are hence enough to give mortals the hope of an after-life", nonetheless a full demonstration of the fact that "the mind is immortal by its very nature" would require "an account of the whole of physics". We need to know that substances are, by their nature, incorruptible and cannot ever cease to exist unless they are reduced to nothingness by an act of God; and that while body or matter per se is a substance, and thus just as imperishable as a soul, any particular

¹³ Oeuvres de Descartes, ed. Charles Adam and Paul Tannery, 12 vols. (Paris: J. Vrin, 1964-7; abbreviated as AT), vol. 7, p. 3.

human body, being nothing but a collection of material parts, lacks the integrity of a true substance and is subject to decay. ¹⁴ In the Second Set of Replies, Descartes claims that "Our natural knowledge tells us that the mind is distinct from the body, and that it is a substance... And this entitles us to conclude that the mind, insofar as it can be known by natural philosophy, is immortal." Though he cannot with certainty rule out the possibility that God has miraculously endowed the soul with "such a nature that its duration will come to an end simultaneously with the end of the body", nonetheless, because the soul is a substance in its own right, and is not subject to the kind of decomposition to which the body is subject, it is by its nature immortal. ¹⁵ When the body dies, the soul—which was only temporarily united with it—is to enjoy a separate existence.

Unlike Descartes, Spinoza's views on the immortality of the soul are notoriously difficult to fathom. He seems to flirt with the doctrine in the early and abandoned *Short Treatise on God, Man and His Well-Being*, but the relevant chapter is highly cryptic and ambiguous.¹⁶ Part Five of the *Ethics*, in which he lays out his mature doctrine of the eternity of the mind, has caused great perplexity among commentators and has led many to pull out their hair. "Rubbish which causes others to write rubbish", claims Jonathan Bennett. This part of the *Ethics*, he insists, "has nothing to teach us and is pretty certainly worthless".¹⁷

In fact, Bennett is absolutely wrong. Part Five is the most important part of the *Ethics*. It is the culmination of the whole work. And it is, I believe, absolutely clear that in it Spinoza intends to deny the personal immortality of the soul. Moreover, the denial of personal immortality is an essential element in his overall philosophical project. I briefly argue for that point below. But my main point here is that what Spinoza found most unacceptable in Descartes's dualism of mind and body, and what moved him to come up with his own monistic conception of the person and the metaphysical identity of mind and body, was the support that Descartes's view lends to the doctrine of personal immortality, in his mind one of the most pernicious of doctrines. In

¹⁴ AT 7, 13-14.

¹⁵ AT 7, 153-4. The translation is from *The Philosophical Writings of Descartes*, ed. John Cottingham, Robert Stoothoff and Dugald Murdoch, and Anthony Kenny, 3 vols. (Cambridge: Cambridge University Press, 1984), vol. 2, pp. 108-9.

See Chapter 23 and Appendix II.
 A Study of Spinoza's Ethics, 372, 374.

other words, perhaps the most important factor—and, I would argue, the most overlooked factor—in Spinoza's rejection of this central element of Descartes's philosophy was the question of the immortality of the soul.

According to Spinoza, the human mind partakes of eternity in two distinct ways. First, there is the eternity that belongs to it because it is the idea—or the expression in the attribute of Thought—of the material essence—in the attribute of Extension—of the human body.

Vp22: In God there is necessarily an idea that expresses the essence of this or that human body, under a species of eternity [sub specie aeternitatis].

Demonstration: God is the cause, not only of the existence of this or that human body, but also of its essence, which therefore must be conceived through the very essence of God, by a certain eternal necessity, and this concept must be in God. (G II, 295/C 607)

Any actually existing human body persists durationally, in time and within the causal nexus of other finite things that affect it and determine it. Toes stub against tables; arms throw balls; snow forts come crashing down on us. This sequence of affairs begins in time, pursues its course in time, and comes to an end in time. The duration of the body as actually existing is limited; so are all the numerous modifications of the body that come about through its interactions with other finite modes. But every human body—in fact, every existing body of any type—also has an aspect sub specie aeternitatis, "under a form of eternity". There is an essence of that body in its extensional being, an extended nature abstracted from its temporal duration. Whether it is a case of a table, a baseball, a snow fort or a human body, its essence would be a type of formulaic mathematical or dimensional mapping of that body that identifies it as the particular parcel of extension that it is, as the particular possible way of being extended that that body represents. Any body is nothing but a specific ratio of motion and rest among a collection of material parts. Its unity consists only in a relative and structured stability of minute bodies. 18 And this is what is reflected in its essence, its eternal being. At this level, no question whatsoever is raised about whether the body actually exists in nature or not. Because it is outside all duration, making no reference to time, this essence of the body is eternal.

¹⁸ See II L3: G III, 99-100/C 460.

Now given Spinoza's general parallelism between the attributes of Extension and Thought, and given the resulting and more particular parallelism in a human being between what is true of the body and what is true of the mind, there are, then, likewise—and necessarily—two aspects of the human mind, which is nothing other than the idea of the body. First, there is the aspect of the mind that corresponds to the durational existence of the body. This is the part of the mind that reflects the body's determinate relationships in time with the other bodies surrounding it. Sensations and feelings—pain, pleasure, desire, revulsion, sadness, fear, and a host of other mental states—are all the expression in the mind of what is concurrently taking place in the body in its temporal interactions with the world. I feel pain when I stub my toe. These passions belong to the mind to the extent that the human being is a part of "the order of nature" and, through his body, subject to being affected by the world around him.

The parallelism also requires, however, that this part of the mind comes to an end when the duration of the body comes to an end, that is, at a person's death. When the body goes, there are no more pleasures and pains, no more sensory states. All of the affections of the body of which these sensations, images and qualia are mental expressions cease at death—the body is no longer "in the world" responding to its determinations. Thus, their correlative expressions in the mind cease as well. But there is another part of the mind—namely, that aspect of it that corresponds to the eternal aspect of the body. This is the expression in the attribute of Thought of the body's extended essence. Like its correlate in extension, this aspect of the mind is eternal. ¹⁹ It is a part of the mind that remains after a person's death.

Vp23: The human mind cannot be absolutely destroyed with the body, but something of it remains which is eternal.

Demonstration: In God there is necessarily a concept, or idea, which expresses the essence of the human body (by Vp22), an idea, therefore, which is necessarily something that pertains to the essence of the human mind. But we do not attribute to the human mind any duration that can be defined by time, except insofar as it expresses the actual existence of the body, which is explained by duration and can be defined

¹⁹ In fact, this aspect of the mind is eternal *because* the mode of extension of which it is an expression is eternal.

by time, i.e., we do not attribute duration to it except while the body endures. However, since what is conceived, with a certain eternal necessity, through God's essence itself is nevertheless something, this something that pertains to the essence of the mind will necessarily be eternal.

Scholium: There is, as we have said, this idea which expresses the essence of the body under a species of eternity, a certain mode of thinking, which pertains to the essence of the mind, and which is necessarily eternal. (G II, 295/C 607)

The mind thus includes, as an essential and eternal component, an idea-correlate in Thought of the essence of the body in Extension. This idea-correlate is eternal because it, like the essence of the body it represents, is situated non-durationally within one of God's/Nature's eternal attributes. The mind as the idea of (the eternal essence of) the body is itself eternal.

Notice, however, that this is a very minimal kind of eternity. It is not something in which human beings can take any pride or comfort, for it is an eternity that belongs to all things, human and otherwise. Given Spinoza's metaphysics, and especially the universal scope of the parallelism between Extension and Thought, or bodies and ideas, there is nothing about this eternity of the mind that distinguishes the human being from any other finite being—or, more properly, there is nothing that distinguishes this eternity belonging to the human mind from the eternity belonging to the idea of any other finite body. Human minds are, naturally, significantly different from the Thought-modes or ideas corresponding to other, non-human bodies—they have more functions and greater capacities (including memory and consciousness), because the actually existing bodies of which they are the ideas are themselves more complex and wellendowed than other bodies (such as trees). But this means only that what remains in Thought after a person's death is, like the essence of the body it expresses, more internally complex, so to speak, than the ideas that remain after the dissolution of some other kind of body.²⁰ It is not, however, more eternal.

Nor is it more "personal". It is only the correlate in Thought of a specific ratio of motion and rest in Extension. It expresses a particularly complex ratio, to be sure, but it is generically no different from the idea of the essence of any other body. And there is noth-

²⁰ The intrinsic complexity of the body is reflected in the variety and multiplicity of ideas that make up the human mind; see IIp11-13.

ing distinctly personal about this eternal idea of the body—nothing that would lead me to regard it as my "self", identical to the self I currently am in this life.

V

There is another variety of eternity for the mind in Spinoza's system. It, too, involves the kind of atemporal being characteristic of ideas of essences. But it is, in fact, an eternity that is available *only* to human minds, since it is acquired by rational agents alone.

Human beings, when they are acting rationally, strive naturally for knowledge. Since we are, among all creatures, uniquely endowed with reason and the capacity for understanding—that is, with intelligent minds—we recognize that our own proper good, our ultimate perfection and well-being, consists in the pursuit of what benefits this our highest part. But what else could benefit our highest intellectual faculties except knowledge?²¹

But Spinoza is concerned here not just with the pursuit of any ordinary kind of knowledge. Rather, what is most beneficial to a rational being is a particular sort of deep understanding that he calls "intuitive knowledge", scientia intuitiva, or "the third kind of knowledge". This is an intuitive understanding of individual things in their relations to higher causes, to the infinite and eternal aspects of Nature, and it represents the highest form of knowledge available to us. It consists in the systematic acquisition of what Spinoza calls "adequate ideas". Adequate ideas are necessarily true and reveal certain essential natures of things. The third kind of knowledge situates a thing immediately and timelessly in relation to the eternal principles of Nature that generated and govern it. We strive to acquire an intuitive understanding of the natures of things not merely in their finite, particular and fluctuating causal relations to other finite things, not in their mutable, durational existence, but through their unchanging essences. And to truly understand things essentially in this way is to relate them to their infinite causes: substance (God) and its attributes. What we are after is a knowledge of bodies not through other bodies but through Extension and its laws, and a knowledge of ideas through the nature of Thought and its laws. It is the pursuit of this

²¹ See IVp20-26.

kind of knowledge that constitutes human virtue and the project that represents our greatest self-interest as rational beings.

Vp29s: We conceive things as actual in two ways: either insofar as we conceive them to exist in relation to a certain time and place, or insofar as we conceive them to be contained in God and to follow from the necessity of the divine nature. But the things we conceive in this second way as true, or real, we conceive under a species of eternity [sub specie aeternitatis], and to that extent they involve the eternal and infinite essence of God. (G II, 298–9/C 610)

Sub specie aeternitatis: when we understand things in this way, we see them from the infinite and eternal perspective of God, without any relation to or indication of time and place. When we perceive things in time, they appear in a continuous state of change and becoming; when we perceive them "under a form of eternity", what we apprehend abides permanently. This kind of knowledge, because it is atemporal and because it is basically God's knowledge, is eternal. It is, above all, not connected to the actual existence of any finite, particular thing, least of all the existence in time of the human body.

Now Spinoza suggests, first of all, that the acquisition of true and adequate ideas is beneficial to a person in this lifetime, as the source of an abiding happiness and peace of mind that is immune to the slings and arrows of outrageous fortune. When a person sees the necessity of all things, and especially the fact that the objects that he or she values are, in their comings and goings, not under one's control, that person is less likely to be overwhelmed with emotions at their arrival and passing away.²² The resulting life will be tranquil, and not given to sudden disturbances of the passions. But there is an additional reason why we should strive to acquire and maintain our store of adequate ideas: they represent for us the closest thing available to what is usually called 'immortality'.

Because adequate ideas are nothing but an eternal knowledge of things, a body of eternal truths that we can possess or tap into in this lifetime, it follows that the more adequate ideas we acquire as a part of our mental makeup in this life—the more we "participate" in eternity now—the more of us remains after the death of the body and the end of the durational aspect of ourselves. Since the adequate ideas that one comes to possess are eternal, they are not affected by the demise of the body and the end of our (or any) temporal and

²² See Vp6 and its scholium.

durational existence. In other words, the more adequate knowledge we have, the greater is the degree of the eternity of the mind.

Vp38: The more the mind understands things by the second and third kind of knowledge, the less it is acted on by affects which are evil, and the less it fears death.

Demonstration: The mind's essence consists in knowledge; therefore, the more the mind knows things by the second and third kind of knowledge, the greater the part of it that remains, and consequently the greater the part of it that is not touched by affects which are contrary to our nature, i.e., which are evil. (G II, 304/C 613)

Now it is a bit misleading to say, as I have, that this eternal knowledge is a part of *me* that remains after death. Rather, what remains is something that, while I lived and used my reason, belonged to me and made up a part—the eternal part—of the contents of my mind. The striving to increase my store of adequate ideas is, in this way, a striving to increase my share of eternity. Thus, Spinoza claims, the greater the mind's intellectual achievement in terms of the acquisition of adequate ideas, "the less is death harmful to us". Indeed, he insists, "the human mind can be of such a nature that the part of the mind which we have shown perishes with the body is of no moment in relation to what remains."²³

However, if what one is looking for after this temporal existence is a personal immortality of the soul, then the eternity of the mind held out by Spinoza will seem a very thin and disappointing recompense for having lived a life of good. Since the pursuit of knowledge just is virtue, for Spinoza, it can indeed be said that, in a sense, the increased share in eternity that accrues to a person from the acquisition of adequate ideas is the "reward" for virtue in this life. The degree of one's participation in eternity is thus affected by a person's virtue in his or her lifetime. Nonetheless, it is hard to see Spinoza's account of the eternity of the mind as a doctrine of personal immortality of the soul. Indeed, it is clear to me that he set out to deny, in his own terms, that there is any such thing. Suffice it to say that the adequate ideas that I acquire in this lifetime, and that remain after my death, are, after death, no longer identifiable as "mine". They are not linked to my consciousness, neither by memory nor by awareness itself. Indeed, they are not linked to the life I led in duration by any means

²³ Vp38s.

whatsoever. What remains is simply a body of eternal, abstract knowledge that, after my demise, bears no personal relationship to *me* whatsoever. It is an impersonal collection of adequate ideas. It certainly cannot be identified as *my* mind or *my* self.²⁴

I offer more detailed arguments for all of this elsewhere.²⁵ But let me say here that anyone who even seeks to find in Spinoza a doctrine of personal immortality fails to grasp one of the essential, large-scale aspects of his philosophical project. Regardless of what one thinks of my reading of Spinoza's doctrine of the eternity of the mind, and irrespective of the strength or weakness of the arguments that I offer for that reading, there is one very good reason—indeed, to my mind the strongest possible reason—for thinking that Spinoza intended to deny the personal immortality of the soul: such a religiously charged doctrine goes against every grain of his philosophical persuasions. Seeing how this is so requires standing back from a minute analysis of the propositions of the *Ethics* a bit to consider his entire philosophical project, particularly its moral and political dimensions.

It is clear from the later books of the Ethics and the Theological-Political Treatise that one of the major goals of Spinoza's work is to liberate us from the grip of irrational passions and lead us to an abiding state of eudaimonia, of psychological and moral well-being, in the life of reason. And the two passions that he is most concerned about are hope and fear. 26 These are the passions that are most easily manipulated by ecclesiastic authorities seeking to control our lives and command our obedience. These preachers take advantage of our tendency toward superstitious behavior by persuading us that there is an eternal reward to hope for and an eternal punishment to fear after this life. This constitutes the carrot and stick that they wield to move people into submission. What is essential for them to succeed in their appeal to our hope and fear is our conviction that there is such an afterlife, that my soul will continue to live after the death of my body and that there is a personal immortality. In this way, people can be moved "to live according to the rule of the divine law...not only by this hope [of reward after death for their bondage], but also, and especially, by the fear that they may be

²⁴ It is important to notice that Spinoza explicitly identifies the "person" with an actually existing body and its correlative mind, at IIp13c.

²⁵ Spinoza's Heresy: Immortality and the Jewish Mind (Oxford: Oxford University Press, 2002). chapter 5.

²⁶ See, for example, his preface to the *Theological-Political Treatise*.

punished horribly after death" (Vp41s: G II, 307/C 616). I believe that Spinoza thought that the best way to free us from a life of hope and fear, a life of superstitious behavior, was to kill it at its roots and eliminate the foundational belief on which such hopes and fears are grounded: the belief in the immortality of the soul. Maybe there is an eternal aspect—or two eternal aspects—of the mind. But, he is saying, it is nothing like the personal immortality perniciously held out to, or over us, by the leaders of organized religions.

In this way, the denial of personal immortality is fundamental not only to Spinoza's metaphysics, but also to his moral and political thought. To want to find in Spinoza's philosophy a robust doctrine of personal immortality is deeply to misunderstand Spinoza.²⁷

VI

In his preface to Spinoza's *Descartes's Principles of Philosophy*, his good friend Lodewijk Meyer notes that the reader should not confuse the philosophical ideas synthetically presented in this work with the author's own thinking.

Our author has only set out the opinions of Descartes and their demonstrations, insofar as these are found in his writings, or are such as ought to be deduced validly from the foundations he laid...Let no one think that he is teaching here either his own opinions, or only those which he approves of. Though he judges that some of the doctrines are true, and admits that he has added some of his own, nevertheless there are many that he rejects as false, and concerning which he holds a quite different opinion.²⁸

Meyer offers a number of examples of Cartesian doctrines rejected by Spinoza: the distinction between will and intellect; the identity of thinking substance and the finite human mind; and the limits of human understanding. He does not mention the issue of the immortality of the soul. He had a good opportunity to do so, however, since the immortality of the human soul is one of the issues treated in the "Metaphysical Thoughts" appended to the treatise. Despite the fact that Spinoza's own opinions appear more clearly in this Appendix, much of it, as Meyer notes, is still intended to be an elaboration of

²⁸ G I, 131/C 229.

²⁷ See Spinoza's Heresy, chapter 6.

Descartes's principles. This is particularly the case in chapter 12, where Spinoza summarizes a Cartesian argument for immortality—just the kind of argument, in fact, that, in the *Meditations*, Descartes says is required. But Spinoza does not note any disagreement with them.²⁹ There were good reasons why he (and Meyer) would have been reluctant to advertise his rejection of this doctrine, particularly in the Calvinist context of the Dutch Republic. But reject it he did. And this, I believe, played the crucial role in Spinoza's departure from Cartesian philosophy, and especially from the dualism that formed its metaphysical core. I believe, in fact, that it played a greater role than any philosophical worries about a mind-body problem.

²⁹ "Metaphysical Thoughts", chapter 12.

DIFFERENT CLOTHING FROM LIKE CLOTH: METAPHYSICAL AND ETHICAL DIVERSITIES IN DUTCH CARTESIANISM

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Dutch Cartesianism came in many forms. With the publication of his *Principia* and *Principes* in 1644 and 1647 and *De Homine* and *L'Homme* in 1662 and 1664, Descartes had redefined the way of dealing with problems of physics and physiology, thus inspiring numerous natural philosophers and men of medicine. In their pure Cartesian forms, these schools were soon outmoded, but Cartesianism did not confine itself to natural philosophy. Various types of theological Cartesianisms emerged, ranging from Meyer's paradoxical hermeneutics to Heidanus' dualism between the sinful passions and the grace of reason, and from Röell's rationalism and Andala's commonsensical belief in God and immortality to the Biblical mathematics of the Cocceians predicting the future from their millenarian accounts of the covenant.

New empirical tendencies within science would shape eighteenth-century views on Cartesian epistemology and bequeath to modern philosophy its own Descartes: the rationalist and dualist philosopher. But seventeenth-century Dutch philosophy had seen yet another Descartes: the one who stood at the basis of new ethico-metaphysical views such as those expressed by Heidanus' pupil Arnold Geulincx and his contemporary Benedictus de Spinoza. This branch of Cartesianism is itself a philosophical phoenix. Despite similarities in epistemology and moral maxims, the Descartes-Geulincx-Spinoza triad reveals an enormous diversity when it comes to questions of metaphysical detail. It will be our aim to explore and explain them.

Epistemology

Challenging scepticism in the *Meditations*, Descartes never abandoned his scepticism with regard to the reliability of sense perception. From the first chapters of *Le Monde* onwards, it had been his conviction

that our impressions do not offer us an image of things as they are in themselves. This idea would remain the fil rouge of his philosophy, although many a misunderstanding would later arise from it. Motivated by later methodologies of science, philosophical commentaries would explain Descartes' détachement des sens as a dislike of experience and experiment, or in terms of a 'rationalist' belief that physics might somehow be done in an 'a priori' way. Descartes did indeed mistrust the senses. But it is only in seventeenth-century sources that we still find his reasons for doing so. As Arnold Geulinex explains: if you look at a rod sticking out of a clear pond, you will see a broken stick. And if someone swings around a burning torch, what you see is a circle of fire. We all know that these phenomena are mere outward appearences: there is, in reality, no broken stick and neither is there a burning circle. For Geulinex, this means that such traditional examples of sensuum fallaciæ should not incline us to become sceptics.2 Yet to see this, Descartes and Geulinex say, is part of a learning process. We are not born with perceptive judgement. What we start out with as new-born children is a torrent of impressions that, as vet, form an undifferentiated mass.

As far as Arnold Geulincx was concerned, article 71 of the first part of Descartes' *Principles*, which deals with the preconceived opinions of childhood, sums up the essence of Cartesian philosophy.³ Spinoza might well have agreed. In his *Ethics*, we find a similar line of thought where Spinoza discusses his famous postulates of physics. These postulates and lemmas are not intended as a new mechanics of collision. What Spinoza analyses is a singular case of impact: the collisions of the human body with its immediate surroundings—in

¹ For a discussion of Descartes' so-called 'rationalism' in physics, see: J. A. van Ruler, *The Crisis of Causality. Voetius and Descartes on God, Nature and Change*, Leiden (E. J. Brill) 1995, chapter 7.

² Arnold Geulincx, Metaphysica Vera, Introductio, Pars II, in Opera Philosophica, ed. J. P. N. Land (The Hague, 1891–1893)/Sämtliche Schriften, ed. H. J. de Vleeschauwer (Stuttgart-Bad Canstatt, 1965–1968), [hereafter: Opera] II, 143–144. See also Geulincx, Metaphysica Peripatetica, Introductio, Pars II, Opera II, 200–201 and Annotata in Cartesium, I 71, Opera III, 419: 'nemo adultæ ætatis est, cui non persuasissimum sit, cum videt baculum, . . . [etc.].'

³ Descartes, Principia Philosophiæ I 71, Œwres de Descartes, publiées par Charles Adam & Paul Tannery (Paris, 1897–1913/1964–1971), [hereafter: AT] VIII-I, 35–36/The Philosophical Writings of Descartes, translated by John Cottingham, Robert Stoothoff, Dugald Murdoch and Anthony Kenny (Cambridge, 1985–1991), [hereafter: CSM] I, 218–219. Cf. Arnold Geulincx, Annotata Majora In Principia Philosophiæ Renati des Cartes (Dordrecht, 1691).

particular the impressions made by our nervous system on the brain.

The impressions a physical environment may print on our organs of sense form Spinoza's first type of knowledge: light falls on the eye, sounds make an impact on the ear drum, and a child hurts itself when coming too close to the fire. This first type of knowledge, the knowledge based on sense perception, is the basic type. Yet as with Descartes and Geulincx, there is a chronological factor to this: the first type of knowledge is also the *original* type. Spinoza shared the Cartesian conviction that human cognition develops by degree. It may develop to celestial heights, yet all primary cognition is the result of a deluge of sense impressions waking the new-born child into a first knowledge of its surroundings.

A second cognitive phase occurs when, feeling the objects that surround us, we tend to mistake and even to mystify their physical make-up. As Descartes formulates it in *Principia* I 71:

[The mind in our early childhood] attributed to [the objects] not only sizes, shapes, motions and the like, which it perceived as things or modes of things, but also tastes, smells and so on, the sensations of which were, it realized, produced by the objects in question.⁴

To Cartesian eyes, these unfortunate 'secondary' qualities could not stand metaphysical scrutiny—a view which was to haunt Cartesian philosophy in later years, especially since Simon Foucher put forward the question whether God would not be just as much a deceiver for letting us believe in a coloured world as in an 'extended' one.⁵ Yet for all their reliance on the metaphysical veracity of the mechanical interpretation of matter, our Cartesians had other epistemological reasons for distinguishing between what is felt and what is understood. In the scholium to proposition 35 of *Ethics* II, Spinoza writes that 'when we look at the sun,' we imagine it:

as about 200 feet away from us, an error that does not consist simply in this imagining, but in the fact that while we imagine it in this way, we are ignorant of its true distance and of the cause of this imagining. For even if we later come to know that it is more than 600 diamters of the earth away from us, we nevertheless imagine it as near.

⁴ Descartes, Principia Philosophia I 71, AT VIII-I, 35-36/CSM I, 219.

⁵ Cf. Richard Watson, *The Dounfall of Cartesianism, 1673–1712: A Study of Epistemological Issues in Late 17th Century Cartesianism* (The Hague, M. Nijholt, 1966), 69/Richard Watson, *The Breakdown of Cartesian Metaphysics* (Atlantic Highlands, NJ, Humanities Press, 1987), 83.

For we imagine the sun so near not because we do not know its true distance, but because an affection of our body involves the essence of the sun in so far as our body is affected by the sun.⁶

Lying on a California beach, it is hard to imagine that the sun does not rise somewhere in the desert behind us or that it will set even further westward than Hawaii. In our days of civil aviation we may be disinclined to imagine the sun at 200 feet, but we can nonetheless grasp Spinoza's argument. If one judges the distance from the beach to the sun in terms of observable terrestrial distances, one completely misjudges the real, astronomical measure.

Spinoza analyses our false assumptions in this case in terms of a 'privation of knowledge' which is characteristic for inadequate, fragmentary, or confused ideas. Still, although there is a lack of knowledge, there is also something positive here. Someone on the beach is having a certain impression on the basis of direct perceptual information. There is, in other words, knowledge of the first degree. Spinoza points out that this is no 'absolute privation' and that what is untrue in the sun bather's impression is something mental, not physical: 'for it is Minds, not Bodies, which are said to err or be deceived'. Again Spinoza's epistemological line of argument is basically Cartesian and reminds us of the sixth part of Descartes' *Meditations*, where Descartes argues that error and deception (*falli*: to be deceived) do not formally exist in the material process itself.⁸

Physical and physiological processes of perception force 'confused' or 'inadequate' ideas on us all the time—something Spinoza, Geulincx and Descartes see as an inevitable by-product of our human condition. Nature, says Descartes, appears to have taught me things which in reality are nothing but 'ill-considered judgements':

Cases in point are the belief that any space in which nothing is occurring to stimulate my senses must be empty; or that the heat in a body

⁶ Spinoza, Ethics IIp35s. Translation from: The Collected Works of Spinoza, vol. 1. Edited and Translated by Edwin Curley (Princeton, 1985), 473.

⁷ Spinoza, Ethica IIp35. Translations from Curley, 472-473.

⁸ See for Descartes' views on the origin of error: *Meditationes* VI, AT VII, 83ff./CSM II, 58ff.

⁹ Cf. e.g. Spinoza, *Ethica* IIp29s/Curley edition, 471, where Spinoza acknowledges the necessarily inadequate character of our knowledge in all cases in which the mind is determined from without, *ex rerum nempe fortuito occursu*. See also Descartes, *Principia Philosophiæ* I 72, AT VIII-I, 36–37/CSM I, 219–220, where he discusses the persistent charachter of our 'childhood' misconceptions and Geulincx' commentary on this passage: *Annotata in Cartesium*, I 72, *Opera* III, 419–420.

is something exactly resembling the idea of heat which is in me; or that when a body is white or green, the selfsame whiteness or greenness which I perceive through my senses is present in the body; or that in a body which is bitter or sweet there is the selfsame taste which I experience, and so on; or, finally, that stars and towers and other distant bodies have the same size and shape which they present to my senses, and other examples of this kind.¹⁰

Descartes' examples include a wide range of epistemological and scientific paradoxes which had haunted philosophy at least since Socrates and Theaetetus had considered the possibility of wine tasting bitter to the sick. It was Descartes' conviction that his new physics could solve these paradoxes through its mechanical representation of perceptual processes. The question apart whether or not the qualities of matter and mind could be clearly distinguished on metaphysical grounds, what intrigued our Cartesians for both epistemological and ethical reasons was the idea that our impressions colour the world in a subjective way.

Arnold Geulincx distinguished a threefold gradation in our habit of attributing perceptual qualities to things perceived. According to the Flemish philosopher, the degree to which we attribute qualities to outside things depends on the intensity with which our body collides with them. We do not feel the impact of physical processes which produce our idea of colours and sounds. Accordingly, we ascribe colours and sounds to outside objects. 12 A collision with a knife, however, is something we do feel. Hence we localize the accompanying pain in our limbs. 13 Then there are unfelt processes depending on our body. Feelings of hunger and thirst are accompanied by bodily dispositions. But in this case, we can only point to 'ourselves' if we are asked to determine the location of such phenomena. Only when hunger develops into a stomach ache, or thirst into a dryness of the throat, are we able to link these feelings to a more specific part of the body.¹⁴ These bodily passions are comparable to passions in the stricter sense, that is to say, to the emotions, which neither allow of precise localization. If we fear or hate someone, we do not

¹⁰ Descartes, Meditationes, AT VII, 82. Translation from CSM II, 56-57.

¹¹ Plato, Theaetetus, 159e-160d.

¹² Geulincx, *Opera* II, 202-203.

Geulincx, *Opera II*, 204. Geulincx himself refers to pain and tickling in general.

Although a child, says Geulincx, will probably point at its mouth, if you ask it

where its hunger is, since this is where the remedy goes. Cf. Geulincx, Opera II, 202.

normally attribute this feeling to our enemy, or to a portion of our body, even when we suffer from a pounding heart.¹⁵

Thus, we form ideas of the outside world, of our bodies and 'ourselves'. Yet what we should do is to restrict all feelings to 'ourselves', as we do when having emotions. Cartesian epistemology is an exercise in the awareness that the physical and physiological processes giving rise to a certain mental experience are something wholly different from the experience itself.

INTELLECTUAL SCHEMES

Having followed Descartes in claiming that our mental 'species' do not resemble things as they are without being sensed by our bodies, Geulincx goes far beyond Descartes in his *Metaphysica ad mentem peri-pateticam*. It is for the ideas expressed in this work that Geulincx has been considered a precursor of Kant.¹⁶ Indeed, on the basis of what he has to say with regard to the difference between observed phenomena and things as they are 'in themselves', one easily draws a parallel between Geulincx and later 'critical philosophy'. According to Ernst Cassirer, however, what brings Geulincx close to Kant is not so much the fact that the Flemish Cartesian highlights the unknowability of *Dingen an sich*, but the fact that he regards knowability itself as being dependent on 'forms of thought'. 'Anybody who sees Criticism in that light,' Herman De Vleeschauwer would write in 1957, 'can no longer regard it as the personal discovery of Kant, after he has read Geulincx and Burthogge.¹⁷

The introduction to the *Metaphysica ad mentem peripateticam* instantly points out in what way Geulinex goes beyond Descartes. Apart from

¹⁵ Geulincx, *Opera* II, 203. See also *Opera* III, 407: 'quamvis enim cor in istis passionibus certo modo afficiatur, hanc tamen affectionem potius ad sensum doloris vel commoditatis alicujus referimus, non autem ad ipsam passionem [...].'

¹⁶ Cf. H. J. De Vleeschauwer, *Three Centuries of Geulincx Research*, Mededelings van die Universiteit van Suid-Afrika/Communications of the University of South Africa 1 (Pretoria, 1957), esp. 31–36 and 61ff.

¹⁷ De Vleeschauwer, Three Centuries of Geulincx Research, 63. Vgl. Ernst Cassirer, Das Erkenntnisproblem in der Philosophie und Wissenschaft der neueren Zeit, Berlin (Bruno Cassirer) 1906, 472: 'Wer die Eigenart der Kantischen Lehre in dem Satze sucht, dass wir die Dinge nicht an sich, sondern nur in der Formen und Verkleidungen unseres Denkens zu erkennen vermögen: der müsste in der Tat an diesem Punktean der Originalität der Vernunftkritik irre werden.' Vgl. idem, 598–599, noot 41. The English philosopher Richard Burthogge (ca. 1638–ca. 1703) was a student of Geulincx.

a new physics, philosophy is also in need of a new metaphysics, according to Geulincx. For not only do sense perceptions provide us with a subjective view of things, we also affix intellectual *phasmata* to the world as a result of our ways of thinking, our *modi cogitandi*. *Cogitationes* distort our view of outside things whenever we divide the world into substances, accidents, relations, predicates, wholes and parts—as if the world itself were 'infected' by them.¹⁸

Geulincx' criticism is obviously directed against the Aristotelian philosophy which, like Gassendi, he had been forced to teach for many years. Yet his critique seems to surpass any contemporary nominalist, Ramist, atomist or Cartesian analysis. Geulincx does not contrast the abstract notions of thought with the real existence of particulars; what he does is to cast doubt on the ontological significance of notions of 'being', 'substance' and 'thing' as such. All ideas related to substantiality are ultimately categorizations of the mind, which lets itself be deceived by the ways in which we express ourselves in language. There is no reason for things as they are in themselves to be divided into the grammatical or logical categories which we make use of when we discuss or think of them. The idea of substance itself is nothing but the ontological solidification of our use of substantive nouns. Likewise, accidents match adjectives.²⁰

Geulinex urges the reader to take seriously what the Scholastics had themselves asserted without realizing the implications of their claim: propter nostrum dicere nihil mutatur in re—what is said with regard to ourselves has no impact on things.²¹ What we hold in our right hand, we call 'right', and we call 'left' what we hold in the other. Our way of thinking in this case changes nothing, however, with regard to the things as they are in themselves.²² Likewise, our ways of speech and categories of thought do not have any impact on, or even any relevance for, the modes of being of 'things' as they might be independently

¹⁸ Geulincx, Metaphysica ad mentem peripateticam, Opera II, 204: 'Inde enim vocamus quaedam objecta nostra, substantias, accidentia, relationes, subjecta, praedicata, tota, partes, etc.; quae omnia cum tantum dicant modos aliquos nostrae intelligentiae, solemus tamen ea considerare quasi res aliquas, quae ipsae in se infectae sunt istis phantasmatibus intellectualibus.'

¹⁹ I have previously discussed this point in a paper on 'Arnold Geulincx' kritiek op de peripatetische metafysica', which is forthcoming.

²⁰ Geulincx, *Opera* II, 215–216. Vgl. Cassirer, *Das Erkenntnisproblem*, 461: 'Es ist die *Sprache*, ihre Eigentümlichkeit und ihre Forderungen, deren Leitung Aristoteles in der Entdeckung der einzenen Grundbegriffe überlässt.'

²¹ Geulincx, *Opera* II, 199, 236.

²² Geulincx, Annotata ad metaphysicam, Opera II, 300.

of our linguistic or intellectual way of grasping them.²³ But if even 'being' (or 'entity', ens) and 'thing' are, as Geulincx claims, ways or 'forms' (modi) of thought, applied and affixed to 'things' by the intellect, how can we truly discuss what we see and feel and what we think at all? Surely we can—and we must, Geulincx argues. We are bound to apply linguisitic categories and to keep applying them:

things [as they are] in themselves are not things, or do not have that *modus* of our intellect by which they are given the status of 'things'. Yet, when we wish to speak of them even in this way, that is to say if we wish to speak of them in the way they are in themselves, we necessarily attribute to them the form (*modus*) of a subject or entity, or rather, we necessarily grasp them [in this way]. For even in the expression itself, with which we talk about them 'as they are in themselves', we do not accept them as they are in themselves, but we give them the status of a subject.²⁴

There is no getting around it: if we wish to think or to talk about anything, we shall necessarily misrepresent what we think or talk about by forcibly applying our logico-linguistical framework.

Contrary to Kant, however, Geulincx does not thereby rule out the possibility of a positive metaphysics. Indeed, even if we cannot talk about things without applying our subject-predicate schemes, we may still know what things are like: 'Things in themselves are what they are, namely minds or bodies.'²⁵ And Geulincx would write a whole book on metaphysics apart from the *Metaphysica ad mentem peripateticam*. This time, however, it was a 'true' metaphysics, the *Metaphysica Vera*, in which Cartesian dualism received a new, experiential, and, on account of Geulincx' strong predilection for wonder and awe, almost mysterious flavour.

METAPHYSICS IN A STREAM OF CONSCIOUSNESS

Geulincx would disappoint his later Kantian commentators. If concepts like 'thing' and 'entity' are simply Verstandesbegriffe, Ernst Cassirer

²³ Cf. Ernst Cassirer's commentary on Geulincx, *Das Erkenntnisproblem*, 459: 'Arten und Beschaffenheiten des Gedankens übertragen wir auf die Gegenstände selbst, sodass wir Substanze und Accidentien, Subject und Prädikat, Relation, Ganzes und Teil nicht als Formen des Verstandes, sondern als bestehende Dingen ansehen, denen jene 'intellektuellen Vorstellungen' an und für sich anhaften.'

²⁴ Geulincx, Opera II, 215.

²⁵ Geulincx, Opera II, 215.

argues, how could one continue discussing *Wesenheiten* and *Dinge*, as if we knew these independently of our cognitive manipulations?²⁶ Accepting the categories of mind and body, Geulincx seems to allow to Descartes what he would never have allowed Aristotle.²⁷

To evaluate the extent of Geulincx' pseudo-Kantianism, let us recapitulate what he did. Geulincx unmasks Scholastic metaphysical notions and distinctions as an interpretative scheme which is enforced upon macroscopic objects by ordinary language. Hence, 'things' turn into 'substances' and the more or less fleeting properties of what we accept as things into 'accidents'. According to Geulincx, such a logicolinguistic grid disfigures our view of reality. This, however, is no reason for banning metaphysics as such. What we could well accept is a metaphysics which does not make use of the logical frame that language uses in order to refer to things. Is there such a type of metaphysics? According to Geulincx, there is: Cartesianism. As he explains in the *Metaphysica ad mentem peripateticam*:

But if you ask: if 'thing' and 'entity' only indicate a mode of thinking of ours, what then are things in themselves? And whether things in themselves are not things? Whether we, even in banishing 'entity' from the catalogue of things, do not still refer to 'entities' and 'things'? I answer that things in themselves are what they are, namely minds or bodies; but that, when we wish to speak of them, we justifyably call them 'things', since this is the mark of the subject. If, therefore, we wish to speak of them, we have to apply this mark.²⁸

Language provides us with categorical forms. In order to express ourselves, we have to assume the usual substantive distinctions. Geulincx' critique of scholastic thought is closer to Wittgenstein rather than Kant. Yet the question remains why Cartesian dualism is seemingly immune to Geulincx' general proscription against the formation of metaphysical categories from linguistic ones.

Geulincx' answer would be that, in the case of Cartesianism, we are not dealing with a linguistic distinction between the mental and the physical. The dualism of mind and body is of an 'experiential',

²⁶ Cassirer, Das Erkenntnisproblem, 462.

²⁷ Cassirer, *Das Erkenntnisproblem*, 463: 'Wir wären nach dieser Einsicht folgerichtig zur unbedingten *Skepsis* verurteilt, wenn hier nicht bestimmte *dogmatische* Behauptungen, die Geulincx aus dem System Descartes' herübernimmt, vor aller Kritik vorausgesetzt würden.' According to Cassirer, the fact that Geulincx' philosophy did not enjoy any historical following is a direct result of what, to Kantian eyes, is the inner contradiction of his metaphysics (cf. idem, 462)—a conjecture wholly at odds with historical fact.

²⁸ Geulincx, *Opera* II, 215.

pre-linguistic nature. This is why, at the start of his *True Metaphysics*, Geulincx is not so much arguing in favour of the Cogito-argument, but simply putting the argument to practice, as it were, by distinguishing the 'innumerable modes of thought' I have from the 'thing one and simple' that is having them:

I am conscious that I see, and not just one, but many modes: sometimes, I have an impression of green, sometimes of yellow, or other colours, sometimes merely an impression of light. I am conscious that I hear, and again in many modes: at various times, I have an impression of noise, of a whisper, or a concert of music. I am conscious that I feel, and again in a great variety of modes: I feel pain that is variously acute, dull, piercing, stabbing, or tickling and throbbing; at other times I feel heat, or cold. Finally, I am conscious that I taste and smell innumerable kinds of flavour and odour.²⁹

At the same time, however,

I am unaware of the presence of any parts within me; in fact I am aware that there are no such parts. Perhaps I have a body (which I shall discuss later), and it has parts; I have none.³⁰

I am acutely aware that the pain in my foot is mine, says Geulincx, and does not belong to anyone or anything else.³¹ The unity of consciousness, then, is something wholly different from the great variety of things and thoughts that this 'I' is conscious of.

Faithful to his own criticism of Aristotelian metaphysics, Geulincx refuses to substantivate this unity of consciousness and does not introduce a metaphysics of substance on the basis of the Cogito. As he says in the *Metaphysica Peripatetica*, 'things' are either minds or bodies—or, in the terminology of the Cartesian *Metaphysics*: there is simply thought and there are as yet metaphysically unidentified objects and processes that occasion them. Although our stream of consciousness excludes a metaphysical categorization into substances and accidents, it occasions a division into experience and things experienced.

Geulincx' experientially defined type of dualism has a fine precedent in Descartes, although this is not immediately clear in Descartes' earlier writings. In the fourth part of the *Discourse*, Descartes does seem to be keen on postponing an all too direct identification of the

²⁹ Geulincx, *Metaphysica Vera* I, 2, *Opera* II, 148. Translation from Arnold Geulincx, *Metaphysics*, Translated with a preface and notes by Martin Wilson (Wisbech, 1999), 32.

³⁰ Geulincx, *Metaphysica Vera* I, 2, *Opera* II, 148. Translation from Wilson, 33. ³¹ Geulincx, ibidem.

'mind' or the 'soul'. Yet he concludes from the fact that ceasing to think would jeopardize the existence of the 'I', that he knows he is

a substance whose whole essence or nature is simply to think, and which does not require any place, or depend on any material thing, in order to exist.³²

More caution is taken in *Meditation* II, where Descartes initially reserves the term 'soul' (anima) for what he had previously taken it to be: 'something tenuous, like a wind or fire or ether, which permeated my more solid parts' and which could account for all vegetative, perceptual and cognitive functions. Now that he has developed a new idea of what is mental, he takes care not to overstate the facts:

At present, I am not admitting anything except what is necessarily true. I am, then, in the strict sense only a thing that thinks, that is, I am a mind, or intelligence, or intellect, or reason—words whose meaning I have been ignorant of until now. But for all that I am a thing which is real and truly exists. But what kind of a thing? As I have just said—a thinking thing.³³

Descartes' prefiguration of Geulincx' experiential stance comes out in full in the *Principia*. Though he there says that thought and extension must be 'considered as nothing else but thinking substance itself and extended substance itself', Descartes makes a point of it that the substantial difference of thought and extension can be decided upon only on the basis of our distict understanding of both. The difference between thought and extension comes first and the idea of substance does not in itself add anything new to this distinction.³⁴

Against Henricus Regius, the same point is made in the *Notæ*. Soul and body are two distinct substances—not because we can grasp the elusive idea of 'substance' itself, but because we cannot reduce the two attributes of thought and extension to each other. Linking thoughts to a body could only be possible if one considers a metaphysical

René Descartes, Discours de la Méthode, AT VI, 33. Translation from CSM I, 127.
 René Descartes, Meditationes de prima philosophia, AT VII, 27. Translation from CSM II, 18.

³⁴ René Descartes, *Principia Philosophiæ* I 63, AT VIII-I, 31: 'Quin & faciliùs intelligemus substantiam extensam, vel substantiam cogitantem, quàm substantiam solam, omisso eo quòd cogitet vel sit extensa. Nonnulla enim difficultas, in abstrahendâ notione substantiæ à notionibus cogtantis vel extensionis, quæ scilicet ab ipsâ ratione tantùm diversæ sunt; & non distinctior sit conceptus ex eo quòd pauciora in eo comprehendamus, sed tantùm ex eo quòd illa quæ in ipso comprehendimus, ab omnibus aliis accuratè distinguamus.'

'subject' to which one could randomly connect a variety of mental and bodily properties. This concept of a neutral metaphysical substrate is, however, exactly what we miss. It is only from their attributes that we may recognize a substance:

As for the attributes which constitute the nature of things, it cannot be said that those which are different, and such that the concept of the one is not contained in the concept of the other, are present together in one and the same subject; for that would be equivalent to saying that one and the same subject has two different natures—a statement that implies a contradiction, at least when it is a question of a simple subject (as in the present case) rather than a composite one.³⁵

Regius and Descartes were discussing the composite nature of man and Descartes seems to have a problem here, because what he says might imperil his own idea of a 'substantial union' and make man into an *ens per accidens*. But Descartes has more to say on the question of substantial compounds. In the case of composite substances, he argues, one might regard the more important substance as the substance proper and the other only as a mode, such as in the case of a man wearing clothes. Since in the latter example this does not mean that the clothes would not form a substance by themselves, so neither should one deny the substantiality of the soul, even if one would regard the body as the primary part of man.³⁷

Despite Descartes' disturbing mix of Aristotelian (man, clothes) and Cartesian (soul, body) types of substances, the core of his argument remains the same: substantiality, if the notion is to make sense at all, is the metaphysical foundation for each 'nature' apart from all others and thus for one 'nature' at the time. But the nature comes first; indeed we only know the substance through its nature. Having experienced the diversity of the mental and the physical, the reduction of the one to the other can only be carried out by making use of a concept of substance that has no content of itself. Making a variation on the costume-theme, we might say that Descartes' point

³⁵ René Descartes, *Notæ in programma quoddam*, AT VIII-II, 349-350. Translation from CSM I, 298.

³⁶ For a variety of reasons, the idea of man being an ens per accidens was regarded extremely dangerous and Regius' defence of the position at Utrecht University on 8 December 1641, had led to the outbreak of what has become known as the Utrecht Crisis over Cartesianism. Cf. Theo Verbeek, "Ens per accidens': Le origini della querelle di Utrecht", Giornale Critico della Filosofia Italiana 1992 (VI-12), 276–288 and Van Ruler, The Crisis of Causality, 187–189.

³⁷ Descartes, Nota, AT VIII-II, 351/CSM I, 299.

here is that one cannot stuff mental clothes into a material locker, or put extended modes in a wardrobe of consciousness. Nor do we know of any unifying locker into which both types of modes would fit. As Marleen Rozemond has argued:

Descartes seems to hold a view that is exactly the opposite of the Bare Subject View. For much of what he says suggests that the principal attribute constitutes the entire substance and that there is no bare subject of inherence at all.³⁸

But what if there were only one locker around? What if, instead of discussing a variety of composite substances, one were to redefine the notion of substance in such a way that it includes a variety of natures? It is hard not to read a proto-Spinozistic line of argument in Regius' criticisms. Nevertheless, it is not evident that Descartes would have been able to counter Spinoza's definition of substantiality in the same way as he fought Regius' materialist dialectic. Descartes' point against Regius was that one should not misuse the concept of substance in order to reduce the mental to the physical. This, indeed, is something Spinoza takes over. On account of *Ethics* II, 7, the metaphysical gulf between matter and mind, although no longer of a substantial nature, is just as evident in Spinoza and more unbridgeable than ever before.

Though categorically stating his case instead of arguing it in the same experiential manner as did Geulinex and Descartes, Spinoza remains faithful to the Cartesian argument that mind and matter are irreducible metaphysical categories. At the same time, the metaphysics of substance is ever more conspicuous in Spinoza. In Geulinex, by contrast, the motivation for a unification of mind and matter on a higher metaphysical level, is wholly lacking:

Particular bodies can be divided, but not Body itself, just as particular minds can be unhappy, but not Mind itself: for we are only modes of Mind, just as particular bodies are only modes of Body.³⁹

³⁹ Geulincx, *Opera II*, 273. Translation from Wilson, 63.

³⁸ Marleen Rozemond, *Descartes's Dualism* (Cambridge, Mass., Harvard University Press, 1998), 10. According to the 'Bare Subject View' a substance 'just is a subject of inherence of properties.' Cf. ibidem. Martial Gueroult has argued likewise in the case of Spinoza's conception of substance. Cf. Martial Gueroult, *Spinoza*, Vol. I, 'Dieu' (Paris, Aubier-Montaigne, 1968), p. 50: 'Par cette réduction de la substance à son attribut essentiel, Descartes et Spinoza expulsent d'elle la qualité occulte à laquelle semblait la condamner sa définition traditionelle comme sujet d'inhérence, support inconnu de ses prédicats, seuls accessibles à l'entendement.'

In Geulincx, Cartesian dualism neither leads to Descartes' tripartition of God, matter and a vast collection of human minds, nor to Spinoza's monism of mind and matter in God, but to a sharp dualistic view of God and extended nature. Though Geulincx does not reintroduce the metaphysics of substance, what we are left with is a strict duality of ontological spheres. We, in as far as we are minds, essentially form part of God, to Whom we shall happily return once our 'human condition' (humana conditio) of mind temporarily coupled to matter, is dissolved. The three positions all have their various bases in different ideas on questions of science, ethics and religion. But before we deal with the question of metaphysical motivation, let us see what happened to the 'I' of the Cogito that Descartes and Geulincx were so eager to defend and to distinguish from the stream of conscioussness opposing it.

THE TURBOCHARGE OF RATIONALITY

Although the 'I' in Geulinex and Descartes is first and foremost an elusive metaphysical instance witnessing impressions from outside, it is at the same time much more than that. Having specified the various visual, audible, tactile, gustatory and olfactory awarenesses, Geulinex adds:

And all these various sensations I variously affirm, deny, connect, disconnect, infer, or abstract, love, hate, or fear.⁴¹

Descartes likewise added a variety of mental operations to the mere awarenesses of 'thought':

⁴⁰ According to Geulincx our minds are in God just as various parts of a field form part of the field as a whole. Cf. Geulincx, *Opera* II, 293/Wilson, 109–110. Presumably, our state of awareness after death is comparable to the state of awareness in a dreamless sleep—a simile Geulincx borrows from Aristotle's discussion of motion and time. Geulincx, *Opera* II, 177 and 281–282/Wilson, 77–78 and 79–80. Cf. Aristotle, *Physics* IV, 11, 218b–219a. It would be of interest to compare Geulincx' position to that of Spinoza in *Ethics* V. Yet an even more striking analogy may be found in Pierre-Sylvain Régis' *Système de philosophie* of 1690. Cf. Richard Watson's discussion of Régis' position in *The Breakdown of Cartesian Metaphysics*, 91: 'After separation of spirit and body—that is, after death—spirit has no longer the idea of extension, imagination, nor memory of nor power over the material world. Spirit then can know and love only itself and God.'

⁴¹ Geulincx, Opera II, 148. Translation from Wilson, 32.

But what then am I? A thing that thinks. What is that? A thing that doubts, understands, affirms, denies, is willing, is unwilling, and also imagines and has sensory perceptions.⁴²

It is, of course, the capacity of the 'I' to produce some of these cognitive manipulations which, for both Descartes and Geulincx, explains our ability to reappraise incoming sense perceptions in mechanical terms. In the sixth *Meditation* especially, it is the new mechanical science which answers the sceptical paradoxes of experience. Through studying physics and physiology, we may come to understand perceptual information in a new way. But the new mechanical science as such is dependent on the rational assent given by the 'I' in its function of an active intellect. The Cartesian ego is the active source of rationality as much as it is a passive receptacle of consciousness.

The question is what would happen if the rational deliberations of the ego could themselves be reduced to the stream of consciousness in such a way that doubt, affirmation and denial would become mere mental reactions to incoming sensory processes. Again, it would be Spinoza who took this next step, and incorporated rationality itself into the natural process of cognition. Where Descartes and Geulincx emphasized that there are various stages in which sense perception develops from our earliest experiences onwards, Spinoza launched the idea that the same is true of reason. In the second book of the *Ethics*, reason its given its full empirical basis. According to Spinoza, ideas develop because the mind not only perceives bodily affections, but also has an awareness of these.⁴³ Or, as the *Tractatus de intellectus emendatione* formulates the point:

the idea, as far as its formal essence is concerned, can be the object of another objective essence, and this other objective essence in turn will also be, considered in itself, something real and intelligible, and so on, indefinitely.⁴⁴

This reflective aspect of our mental awareness is what makes any independent cognitive input by the mind redundant. Because of its reflective aspects, intellection itself has, as it were, a 'reflexive' potential,

⁴² Descartes, Meditationes, AT VII, 28. Translation from CSM II, 19.

⁴³ Spinoza, *Ethica* IIp22: 'Mens humana non tantum Corporis affectiones, sed etiam harum affectionum ideas percipit.' Cf. Curley, 468.

¹¹ Spinoza, Tractatus de intellectus emendatione, § 33. Translation from Curley, 17. Cf. Herman De Dijn (ed.), Spinoza, The Way to Wisdom (West Lafayette, Indiana, Purdue U. Press, 1996), 65.

which turns the use of reason into an automatism of its own. It has been well said that empiricist and sensualist traditions stand very close to Spinoza in their refusal to accept an independent faculty of rational thought. ⁴⁵ John Locke would claim that 'all the materials of Reason and Knowledge' come only 'From Experience'. Condillac would later say that 'We do not in fact create ideas, but only combine those which we have received from the senses by composition and decomposition.' ⁴⁶ If our ideas develop solely on the basis of experience, the idea of a separate faculty for rational judgement might be abandoned.

The mental turbocharge of reflective awareness makes it possible, for Spinoza, to do away with the free decisions of an independent Cartesian mind. In Spinoza, in other words, there is no metaphysical gulf between the realm of primary cognition and the world of rational thought. Indeed, Spinoza is keen on arguing that rational development is no less bound to a strict causality of interconnected ideas. Arguing that the 'idea of the Mind is united to the Mind in the same way as the Mind is united to the Body' (Ethics IIp21), Spinoza explains his position by referring to what he had said in the scholium to Ethics IIp7, the proposition expressing his parallelism of thought and extension. What is actually said in the note itself, is that

whether we conceive nature under the attribute of Extension, or under the attribute of Thought, or under any other attribute, we shall find one and the same order, *or* one and the same connection of causes, i.e., that the same things follow one another.

The relevance of this for what is said in *Ethics* IIp21ff., is that the arrival of rationality is not the result of some separate mental activity, or mental intrusion into nature's causal process:

The idea of the Mind, I say, and the Mind follow in God by the same power of thinking and by the same necessity.⁴⁷

⁴⁷ Spinoza, *Ethics* II, proposition 21 and *Ethics* II, proposition 7. Translations from Curley, 451 and 467 respectively.

⁴⁵ Cf. Jonathan I. Israel, *Radical Enlightenment. Philosophy and the Making of Modernity* 1650–1750 (Oxford, Oxford University Press, 2001), 517: 'by conflating body and soul, and reducing the mind to pure sense perception, [Condillac] also powerfully contributed to forming the materialist ideology of a group of mid-century radical thinkers whom Diderot calls "nouveaux Spinosistes", the thinkers reviving Spinoza's system in a modernized form precicely by identifying soul with the senses and movement with matter.'

⁴⁶ John Locke, An Essay Concerning Human Understanding, edited with foreword by Peter H. Nidditch (Oxford, Clarendon Press, 1975), 104 and [Etienne Bonnot de Condillac,] Essai sur l'origine des connoissances humaines. Ouvrage où l'on réduit à un seul principe tout ce qui concerne l'Entendement Humain (Amsterdam, 1746), vol. I, 144.

Planing down the active aspects of the Cartesian mind and forcing it back into the causal straightjacket of the attribute of thought, Spinoza made one of the most important steps towards what may be regarded as the net result of the first and the second parts of his *Ethics*: the explicit rejection of free will. It is here that external motivations for the epistemological and metaphysical discontinuities within our branch of Dutch Cartesianism come to the fore.

ETHICS IN BETWEEN PHILOSOPHY AND THEOLOGY

Scoffing at all classical philosophers for not having seen the infeasibility of their claim that in questions of morality one should simply play down one's emotions, Arnold Geulincx offered a new alternative: the *Vita Christiana*. Philosophers, says Geulincx, are aware of the fact that the mob are driven by their emotions. They accordingly choose for the opposite route and try to fight what they feel. They may do so by taming one passion with another, but in doing so they are actually quite like the commoners themselves. Cynics and Stoics excel in this type of behaviour: they deny their passions—an absurd and impossible attitude according to Geulincx, since being human is identical to having emotions.⁴⁸

What, then, is the Christian way of looking at things? For Geulincx, a Christian is someone who neither acts on the basis of passionate drives, nor tries to go against them. The Christian just acts according to reason. And this is where Descartes comes in. Geulincx sees a fine parallel between 'true', Cartesian, physics and the type of ethics that accompanies it:

just as we should detach from the senses that propensity which makes us attribute our mental impressions (species) to external things, which (as we have demonstrated elsewhere) [only] occasion these mental impressions, we must likewise withdraw from the passions that inclination of ours which makes us feel inclined and, as it were, driven by a certain fury (violentia) to do something, or to avoid doing something for the sake of, or on account of, these same passions.⁴⁹

The scientific détachement des sens parallels a détachement des passions in ethics. In both respects, it is 'reason' which has to do the job and

⁴⁸ Geulincx, *Opera* III, 107-108.

⁴⁹ Geulincx, Opera III, 112.

the use of reason implies freedom. In their Cartesian interpretation, the emotions have a physical and physiological basis and therefore cannot simply be denied or done away with. As a result, a rational decision is needed in order to interrupt the biological automatism of our reactions. We do not go against our emotions, but against the acts they would normally lead to. It is in this way that Geulincx needs to hold on to the concept of free will. Only on the basis of a willfull neglect of passionate pressure may the Christian decide the outcome of the battle of the flesh against the spirit.

The concept of free will was thus central to the Christian interpretation of Cartesian ethics. At the same time the freedom of the will was of course a much debated issue in theology. Despite his explicit statement in the Principia that 'we cannot get a sufficient grasp of [God's power] to see how it leaves the free actions of men undetermined', Descartes nevertheless, in his correspondence with Princess Elisabeth, tried 'to give an illustration to explain how [the will] is both dependent and free.'50 The example is one of a king who has issued a prohibition against dueling, but nevertheless orders two gentlemen to go to the same place, knowing that they will fight. The argument is that this royal foreknowledge does not make the king's two subjects less accountable for their own free action. The example is rather interesting from a theological point of view, since the supposed inevitability of the fight would seem to put Descartes on the Calvinist side, which claims all men are sinners without divine assistence. Yet the illustration does little to explain the question of freedom in philosophical terms. Indeed, real freedom does not surface at all here. Be it true that, in Cartesian terms, the basic freedom of indifference of the dualists remains intact, the two gentleman supposedly do not make any use of their rational capabilities on account of which they might ignore their passionate inclinations. Elisabeth apparently resigned herself to the fact that she would never understand, or refused to be further led astray by the philosopher's dialectics. In any case, even in Descartes' hands, the question of fusing the philosophy of rational freedom and the theology of divine grace remained unsolved.

For Descartes, the natural philosopher whose refusal to become entangled in theological controversy all but passed into a proverb,

⁵⁰ Descartes, *Principia* I, 41, AT VIII-I, 20 and Descartes to Elisabeth, AT IV, 352–353 respectively. Translations from CSM I, 206 and CSM III, 282.

this may not have been much of a problem. The question was different for Geulincx, however, who would have liked to pass for a Christian philosopher and to do in philosophy what pre-Cartesian philosophy had been incapable of. Geulincx was aware of the theologico-philosophical impasse. If free, non-passionate, and reasonable actions are the philosophical road to beatitude, theologians might object that by arguing this, we put salvation back into our own hands. In order not to let himself get trapped into theological warfare, Geulincx made an effort to outfox potential critics:

Here, I have to add something. I have not said that humble men first love God and that God subsequently loves them. I have not said it and that should be enough. But those cheeky tattlers enjoy such an esteem with the ignorant, their slaves, that sometimes it is not enough not to have said it without having said that one has not said it.⁵¹

Although he openly shows his dislike of the belligerent preachers of his day, the Arminian controversies still called for caution. Geulincx emphatically claims never to have said that we may provoke spiritual beatitude on our own terms. Yet not having said it, he has neither explained in what way the Cartesian maxim of using one's reason in order to escape immediate passionate reactions is really a free option for transcending sin in the same way as one may freely transcend perceptual error in science.

A similar hiatus occurs in his epistemology. Though stating, in the *True Metaphysics*, that he will show how 'the Father and Creator acts also on our mind and spirit,' it is not clear from what follows that 'the mind that acts on us,' acts on us in other ways than 'through Body and Motion.'⁵² Thus, we have to conclude that, at least in purely philosophical terms, we are as free as we can ever be if we are able not to let ourselves be forced by thoughts arising from external circumstances:

A mind is whatever knows and wills; our Father knows and wills: therefore he is a mind. He knows because He arouses in our mind those thoughts that do not depend on us [but not those that do depend on us, as we shall see later...].⁵³

⁵¹ Geulincx, *Opera* III, 64. Quoted from the Dutch edition: Arnout Geulincx, *Van de hoofddeugden. De eerste tuchtverhandeling*, Uitgegeven, ingeleid en van aantekeningen voorzien door Cornelis Verhoeven (Baarn, 1986), 133.

⁵² Geulincx, *Opera* II, 195 and 196. Translations from Wilson, 114 and 116. ⁵³ Geulincx, *Opera* II, 187–188 (my italics). Translation from Wilson, 95. Interpreting

Again, it is not clear what future passage Geulincx is referring to. Yet for Geulincx to be a good Calvinist, God would have to love us first. The indifferent will, powerless in itself, is only free in as far as men are still accountable for their inevitable sins. But real freedom, in its theological sense, is only attained when God's grace enlightens our soul.

In Descartes' example this would mean that, if they were able to restrain themselves and not fight each other, his two dualists would still stand in need of God to make the change from reflex to reason. In order to prove that their freedom remains intact, Descartes simply argued for the accountability of his dualists. But what might change them into moral subjects? Geulincx seems to argue that we must use our mental freedom. But whence does the light of reason come?

Like Spinoza, Geulincx was eager to show that salvation was possible without any fear of guilt or punishment:

If only we have managed [to assume control over our heart] it will never again strike back with its heels of anger and regret. It will never be shy anymore. It will not linger or run away upon encountering something unusual. It will always be able to follow the pace of reason for the trainer who alone should rightfully tame and ride it.⁵⁴

Nevertheless, on account of the freedom of his will, the reasonable jockey remains wholly accountable for the success of his effort to tame the animal inside. Despite the wide spread of natural sin, accountability seems to remain as central in Geulinex as it had always been in Christian, and in particular Calvinist, dogma.

How different is the situation in Spinoza! In the *Ethics*, the attainment of the rational stance in matters of morality parallels the self-regulation of reason in epistemology. No separate mental activity is needed for people to start choosing the beatifying way. That is to say, no free will, which might miraculously act out of itself to alter either our insight or our behaviour.⁵⁵ Nevertheless, a separate men-

Geulincx in traditional 'occasionalist' and especially Malebranchian terms, Geulincx' concept of freedom has misled many later commentators, who claim he accepted, or at least should have accepted a direct and constant influence of God on our minds and wills. Cf. Han van Ruler, Kennen, lijden, handelen. De erfenis van Descartes bij Geulincx en Spinoza, Mededelingen vanwege het Spinozahuis 82 (Delft, 2002), 22–23, note 101.

54 Geulincx, Van de hoofddeugden, 123.

⁵⁵ On the denial of free will in God and humans, see the famous passages in the *Ethics* such as *Ethics* Ip31,32 and Appendix/Curley, 434-435, 435-439 and 439-446 and *Ethics* IIp48,49/Curley, 483-484 and 484-491.

tal impulse occurs in Spinoza as well, viz. in the context of his definition of activity. For despite his denial of free will, Spinoza gives a strong expression of the Augustinian account of freedom which we also find in Geulincx and Descartes. 'That thing is called free', Spinoza writes,

which exists from the necessity of its nature alone, and is determined to act by itself alone. But a thing is called necessary, or rather compelled, which is determined by another to exist and to produce an effect in a certain and determinate manner.⁵⁶

Freedom is not a question of indetermination, but a question of power. It is therefore not opposed to necessity, but to constraint, just as the Augustinian interpretation of freedom demanded.⁵⁷ This type of freedom even occurs where Spinoza is dealing with mere epistemological matters, such as towards the end of the unfinished *Tractatus de intellectus emendatione*, where it is said with respect to reason that

The clear and distinct ideas that we form seem to follow so from the necessity of our nature alone that they seem to depend absolutely on our power alone. But with confused ideas it is quite the contrary—they are often formed against our will.⁵⁸

It is on account of this interpretation of freedom that Spinoza is able, in the final part of the *Ethics*, to argue that the blessing of rational insight fully satisfies our cognitive and ethico-emotional possibilities. The philosopher chooses the good once he sees it, just as the Calvinist could not but accept the God-given grace that liberates his soul.

What is absent in Spinoza, is not the freedom of divinely inspired insight, but only the paradoxical 'freedom of the will' in its every-day form: the so-called freedom which characterizes our way of dealing with obscure, inadequate, types of knowledge—a freedom which neither in its Cartesian nor in its Calvinistic forms had been much

⁵⁶ Spinoza, Ethics I, definition 7. Translation from Curley, 409.

⁵⁷ Cf. Gueroult, *Spinoza* I, 77: 'La liberté n'est donc pas absolue indétermination, mais détermination par soi ou détermination interne, opposée, non à la nécessité, mais à la contrainte ou violence, c'est-à-dire à la détermination par un autre ou détermination externe.' It was for Descartes' similar, Augustinian account of freedom that Abraham Heidanus introduced Cartesianism into theology as far back as 1645. See my article 'Reason Spurred by Faith: Abraham Heidanus and Dutch Philosophy', due to be published in Wiep van Bunge (ed.), *Traditions of Dutch Philosophy and Russia*, *Geschiedenis van de Wijsbegeerte in Nederland* 12.

⁵⁸ Spinoza, Tractatus de intellectus emendatione, § 108, VI. Translation from Curly, 44/ De Dijn, The Way to Wisdom, 169.

of a freedom anyway, since in its state of 'indifference', our free will is in fact bound and restrained by its slavery to epistemological doubt, to passion and sin. The disappearence of the free rational agent in Spinoza thus leads to a naturalistic turn in ethics, a turn away from moral accountability, without, however, losing sight of what religion traditionally aspired to acheive in terms of a God-given mental freedom and rejection of self-concern.

Neither Descartes nor Geulincx solved the question of freedom in both theological and philosophical terms. The natural philosopher and the Christian rationalist that they were, neither must have felt the need to solve what was better regarded unsolvable. Spinoza's position is different. Adjusting the new tools of Cartesian metaphysics and thus reinventing Heidanus' and Geulincx' project of finding a new philosophical basis for morality, Spinoza tried to do in philosophical terms what religion aimed at by other methods of conviction. This is a likely step for someone who, in the 1650s, made the unlikely decision to abandon his father's faith without embracing another. In Spinoza the puzzle had to fit. Adequate knowledge provides the philosophical apparatus for understanding both the shortcomings of a superstitious imagination and its legitimate aims. Here, the philosopher retells the story of his life. Spinoza spread the idea that a free rational mind has nothing of its own to contribute to empirical knowledge. Given the ethical parallels of this claim, his message reads as an apology.

A PHILOSOPHER'S LIFE

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After Descartes graduated in Law in November 1616, he seems to have spent one year with his family before joining the Dutch army in Breda, where he probably arrived at the beginning of 1618.1 At the end of that year he met Isaac Beeckman (1588–1637), spent much time with him, and left for Germany, possibly via Denmark.2 Descartes was present at the coronation of the Emperor, in Frankfurt, in September 1619.³ He met a learned Jesuit, Johannes Molitor (1570– 1627), who gave him a copy of Charron's Sagesse. And he probably met the mathematician Faulhaber (1580-1635).5 It is in the region of Ulm or Neuburg presumably that he also had, in the night of 10-11 November 1619, his famous dreams. He then went back, possibly (but there is nothing to prove it) through the Netherlands, to France, signing a contract in Rennes in April 1622.7 If we skip Descartes' journey to Italy (1623-1625), of which nothing much is known, as

¹ According to a note of Frans van Schooten, Descartes spent 15 months in Breda before leaving for Germany: 'mansit autem Bredae per 15 menses, unde in Germaniam discessit, dum intestina bella ibi orirentur, ut mihi ipse narravit.' AT X, 646. Since Descartes certainly left Breda in May 1619 (see below) that would mean that he arrived there at the beginning of 1618. All works of Descartes are quoted in the latest reprint of the Adam/Tannery (AT) edition (11 vols., Paris: Vrin, 1996). References to 'Watson' concern Richard A. Watson, Cogito ergo sum: The Life of René Descartes, Boston: Godine, 2002.

Descartes' letter to Beeckman of 29 April, 1619 (AT X, 164-165) is not from Copenhagen but from Amsterdam, where Descartes planned boarding a ship to Copenhagen (against Watson, p. 90).

Discours II, AT VI 11. The coronation festivities were from July to September. ⁴ See the note by Frédéric de Buzon in Bulletin Cartésien 20/Ārchwes de Philosophie,

⁵ For the latest and I believe definitive argument see Édouard Mehl, Descartes en Allemagne 1619-1620, Strassburg: Presses Universitaires de Strasbourg, 2001, pp. 192-194.

Discours II, AT VI, 11; Cogitationes privatae, AT X, 216.
 AT I, 1; Adrien Baillet, Vie de Monsieur Des-Cartes, 2 vols., Paris: Horthemels, 1692 (henceforward cited as 'Baillet'), I, 116. Other contracts were signed in May, June and July; Baillet II, 460. That Descartes passed a second time through the Low Countries (including the Spanish Low Countries) is the (unlikely) suggestion of Baillet.

well as a period in Paris of about three years (1625–1628), in which the intellectual foundations were laid for everything that would follow, we arrive at one of the most discussed decisions of Descartes' life, that of settling in the United Provinces.

Most commentators present this as a decision of a definitive nature. According to them Descartes literally fled France (more particularly his relatives) and settled *permanently* in a foreign country, which he had chosen carefully because it met certain very specific requirements. But how certain is that? The hypothesis I want to explore in this short contribution to a 'Festschrift' for Descartes' latest biographer is that Descartes *came* to the Netherlands for one or more precise projects; that it was his intention to *return* after these would be finished; and that he *remained* more or less by accident—in other words, that the reasons why eventually he remained in the Netherlands were not the same as those for which he came.

On the reasons why Descartes came to the Low countries Beeckman tells us something in a note on Descartes' first visit, on 8 October 1628, after he had not seen him for nine years:

He told me that in arithmetic and geometry he had achieved everything he could wish; that is, in those nine years he had done all a human intellect could do. Of which he gave me some unmistakeable examples. Later, he said, he would send me from Paris his Algebra, which he claimed was finished and which would allow him to arrive at a perfect geometry; indeed, at all knowledge humanly possible. He would send it before long or come here himself to publish (edendam) and polish (limandam) it and do together (communi opera) whatever was as yet to be done in the sciences.⁸

So if Descartes were to come back to Dordrecht or the Netherlands at all, which was not yet certain, his first intention was to work with Beeckman and 'publish' and 'polish' his 'Algebra,' not as an isolated piece of mathematics but as the basis for a complete system of knowledge. But Descartes had not yet made up his mind: He would either

⁸ 'Is dicebat mihi se in arithmeticis et geometricis nihil amplius optare: id est, se tantum in iis his novem annis profecisse, quantum humanum ingenium capere possit. Cujus rei non obscure mihi specimina reddidit. Paulo post Parisiis suam Algebram, quam perfectam dicit, quaque ad perfectam Geometriae scientiam pervenit, imo qua ad omnem cognitionem humanam pervenire potest, propediem ad me missurus, aut ipsemet huc ad eam edendam et limandam venturus, ut communi opera id quod restat in scientiis perficiamus.' Beeckman, *Journal*, ed. Cornelis de Waard, 4 vols., The Hague: Nijhoff, 1939–1953, vol. 3, pp. 94–95.

send his Algebra or come himself.⁹ In any case, the reason why Descartes came to the Netherlands was not to start some solid work (which he had not managed to do in Paris because he was overrun by friends and relatives) but to wrap up a number of projects he had already started and even finished—indeed, his Algebra had reached a publishable stage.¹⁰ Nothing indicates that he wanted to remain for good—indeed, it is not even clear that he wanted to come.

There is yet another piece of evidence, which is easily overlooked because it was published after the latest version of the Adam/Tannery edition was closed. I am referring to a letter of 23 February 1634, which was written by Descartes from Deventer to a 'Mademoiselle de La Porte.'11 The woman in question is Marguerite Ferrand, the widow of a Gabriel de La Porte who had been 'conseiller du Roy et esleu en l'eslection de Paris.' She lived in the Rue du Four (in the same street and perhaps the same house where Descartes had lived when he was still in Paris) and was a cousin of Descartes' father. 12 It is an interesting letter, first of all because it shows that the news of the condemnation of Galileo at the end of 1633 did not cause Descartes to leave Deventer instantly and return to Amsterdam.¹³ On the contrary, he remained in Deventer and continued working on problems of biology. So Descartes was not 'stunned' by the news of Galileo's condemnation; it probably did not 'knock him off his foundations.' Nor is it necessary to assume that he was 'in a state of near total emotional collapse,' let alone that that was the reason why 'one Sunday afternoon in a breezy room, he was seduced by a saucy Dutch maid.'14

⁹ Descartes apparently did send a few unpublished works. Beeckman quotes a few abstracts, which can be identified as fragments of the *Dioptrique* and the *Géométrie*; cf. *Journal*, vol. 4, pp. 135–139.

This is not contradicted by a further note of Beeckman in which he deplores the eagerness of young and immature people to publish their views: 'Ille [Descartes] vero necdum quicquam scripsit sed usque ad 33 annis aetatis suae annum meditando rem quam quaesivit, perfectius quam reliqui invenisse videtur.' *Journal*, vol. 3, p. 95. All it means is that Descartes believes he is ready to publish, now.

M. Jurgens/J. Mesnard, 'Quelques pièces exceptionnelles découvertes au minutier central des notaires de Paris (1600-1650), Revue d'histoire littéraire de la France, 79 (1975) 739-754 (pp. 744-748). The reprint of AT was closed in 1970.

12 For Descartes' address in Paris see Baillet I, 136. Marguerite was a full cousin

¹² For Descartes' address in Paris see Baillet I, 136. Marguerite was a full cousin of Descartes' father (by his mother, who was a Ferrand). Her husband died in 1632. They had no children.

¹³ The letter to De Wilhem of 12 December 1633, dated from Amsterdam, was probably written during a short visit; AT I, 273–274.

¹⁴ These are all expressions of Watson, p. 182.

Admittedly, Mersenne worried about the fate of his friend and wrote to Rivet: 'I have no news from Mr de Chartes [sic] who went to live in Deventer, where Mr Reyneri is teaching—which makes me fear that he is either dead or ill. I enclose a word for Mr Reynery to see what is going on.'15 But before long Mersenne was reassured, for already on 12 March he wrote: 'I am glad to have had some news from those of Deventer'16—so even at that point Descartes was still staying and working with Reneri in Deventer. The communication problem on the other hand had been caused presumably by the fact that the Deventer messengers were unreliable.' Finally, the reason why Descartes did leave Deventer and went to Amsterdam sometime in May was presumably that in 1634 Reneri—who seems to have been very effective in keeping Descartes at work—had to move to Utrecht, where he was appointed professor of philosophy.'

Descartes' letter to his cousin is also interesting because it is attached to a legal document, which describes the contents of a trunk Descartes had given her before he left France. At the beginning of 1634 a valet of Descartes (described as 'the limousin who used to be my valet in Paris')¹⁹ had presented himself at Marguerite's, showing

¹⁵ 'Je n'entends plus de nouvelles de Mr de Chartes qui était allé demeurer à Deventer, où enseigne Mr Reyneri, ce qui me fait craindre qu'il soit mort ou malade. Je vous mets ici un petit mot pour le faire tenir audit Reyneri, affin de sçavoir ce qui en est.' Mersenne to Rivet, 8 February 1634, Correspondance de Marin Mersenne (cited as CM), IV, 37. Henricus Reneri (1593–1639) was appointed professor of philosophy at the 'Ilustrious School' of Deventer at the end of 1631. Descartes joined him in May 1632; see Descartes to De Wilhem, 23 May 1632, AT I, 253–254.

¹⁶ Je suis bien ayse d'avoir sceu des nouvelles de ceux de Deventer.' Mersenne to Rivet, 12 March 1634, CM IV, 69. Descartes himself had re-established contact at the beginning of February; Descartes to Mersenne, [February] 1634, AT I, 281/CM IV, 26–27.

¹⁷ 'nos messagers sont infidelles' Descartes to Mersenne, 22 July 1633, AT I, 269/CM III, 460 (cf. 457). The mail was mostly a private affair, often operating between two particular towns; cf. J. C. Overvoorde, *Geschiedenis van het postwezen in Nederland vòòr 1795*, Leiden: Sijthof, 1902.

¹⁸ The decision to appoint Reneri was taken by the Utrecht Vroedschap on 15/25 January 1634; cf. Acta et decreta Senatus/Vroedschapsresolutiën en andere bescheiden betreffende de Utrechtsche Academie, ed. G.W. Kernkamp, 3 vols., Utrecht: Broekhoff, 1936–1940, vol. 1, p. 35.

¹⁹ A 'limousin' is someone from the region around Limoges—it is not a first name (as Watson seems to think, p. 76). In the present document the real name of the *Limousin* is given as Clément Chamboir, said to live in the rue du Murier in the parish of St. Étienne-du-Mont (Paris). The fact that Chamboir already was Descartes' valet in Paris suggests that Descartes took him with him to the Netherlands. It is unlikely that Descartes ever taught him mathematics, as Watson believes, for according to the present document he could neither read nor write. The 'Limousin'

her a letter of Descartes's that authorized him to claim its contents. Marguerite on the other hand had called in a notary public, presumably to avoid difficulties with her family or indeed with Descartes. The resulting deed, made up at her house on 13 April 1634 and signed by her and two officials, is interesting in itself because it contains a description of the various items Descartes had left in the care of his cousin: various cloths, a 'sacq de cuir et velours fermant pour aller à l'esglise,' (a leather and velvet closed bag for church), several pairs of shoes and gloves, a hunting outfit and, very intriguingly, a 'tableau sur bois où est représentée une courtisane' (a painting on wood of a courtisan). All that should be given to Descartes' valet, except books and papers, which Descartes asks Marguerite to keep 'in the most useless place of her house.' According to Descartes's letter the trunk had been given to her only because he wished 'to do as usual and so conceal the length of my journey'-so at the beginning of 1629 Descartes' family and friends should believe that this time. too, René would be away for no more than, say, two or three years whereas actually he went forever. This is possible of course but is it really credible? Descartes was over thirty and financially independent, so even if he wanted to go forever nobody could stop him. Is not rather the fact that in 1634 Descartes decided to dispose of the trunk, an indication that it was only then that he decided to severe all links with France, possibly because he was not sure of the effects Galileo's condemnation would have in his own country? So much is clear, in 1629 Descartes believed that none of his projects would take more than two or three years, although actually some of them would be finished, if at all, only in 1637.

The available evidence shows that at the beginning of 1629 Descartes planned to work on three rather precise projects. The first is mentioned by Beeckman: It was Descartes' intention to 'publish' (edere) an Algebra, after having 'polished' (limare) it together with him, Beeckman. Now Descartes did publish a 'Géométrie' in 1637 (as one of the 'essais' accompanying the Discours). It could be described as an 'algebra,' but it also incorporates things Descartes must have

resurfaces in 1638; see Descartes to Mersenne, 31 March 1638, AT, II, 96, and 27 May 1638, AT, II, 144. On 15 November 1638 the Limousin sends a letter, which according to Descartes is too big and contains only 'des recommandations à luy et à toutes ses connoissances de Paris' and which for that reason he refuses to forward to Mersenne (Descartes to Mersenne, 15 November 1638, AT, II, 447–448). That letter apparently was written by a hired professional writer.

learned after 1628-1629, especially in his meetings with Golius.²⁰ It was to be with Golius, presumably, that in June 1630 Descartes temporarily settled in Leiden in spite of the fact that barely two months earlier he had claimed to Mersenne to be 'so tired of mathematics and to appreciate it so little that I would not care to trouble myself solving problems.'21 His only reason to matriculate at the university on the other hand was presumably to take advantage of the profitable tax regime for professors and students—there cannot have been many lectures after 27 June. 22 And in 1631 Descartes sends Golius an 'écrit' in which he discusses, among other things, problems of curved lines and which in a later letter he calls 'mon Analyse.'23 So the 'Géométrie' as we know it now dates only from 1630-1631 and perhaps even later. But in 1628 Descartes believed that it was ready—that little time would be needed to 'polish' and eventually publish it. The fact therefore that it was published only in 1637 was entirely unforeseen in 1628—and how could Descartes have expected to find new inspiration if he did not know Golius until 1630?24

²⁰ Jacobus Golius or Jacob van Gool (1596–1667) was professor of oriental languages and mathematics in Leiden. In 1640 he was one of the arbiters in the Stampioen affair (Watson, pp. 198–199). His brother Petrus, a Catholic monk known as Father Celestinus, was a professor of oriental languages in Rome and served as an important middle-man for the acquisition of oriental manuscripts. The significance of Golius for Descartes (and for others in this period, like Mersenne, Mydorge, Gassendi and Hardy) was that he brought from the Orient a codex with an Arabic version of Apollonius' work on conic sections, which also included Bk V–VII (not known so far). The Codex in question, which after Golius' death was sold to Narcissus Marsh, is now in the Bodleian Library (Golius had kept the original for himself and given a copy to Leiden University, where it is still in the Library).

²¹ 'Je suis si las des mathématiques, et en fais maintenant si peu d'état que je ne saurais plus prendre la peine de les soudre moi-même.' Descartes to Mersenne, 15 April 1630, AT I, 137–147/CM II, 425.

²² Album studiosorum Academiae Lugd.-Bat. The Hague: Nijhoff, 1874, col. 228 (27 June 1630). Among the privileges enjoyed by professors and students was the exemption of taxes on wine and beer (important in an age when water was generally unreliable). Descartes' landlord was Cornelis Heymensz. van Dam, living on the Vaulted Voldersgracht between the Wolsteeg and the Kerksteeg, now Langebrug 38; cf. H. W. Witkam, 'Jean Gillot (Een Leids ingenieur), tweede deel.' Jaarboekje voor de geschiedenis en oudheidkunde van Leiden en omsteken ('Leids Jaarboekje'), 61 (1969), pp. 39–70 (pp. 54–55).

²³ Descartes to Golius, [1631], AT I, 232–235; cf. 2 February 1632, AT I, 236. That the 'ecrit' is nothing but a solution of the problem of Pappus (as AT believe, I, p. 235) is unlikely. This is also the reason why I give the first letter an earlier date than AT: It is inconceivable that Golius would need no more than two weeks to digest Descartes' Géométrie.

²⁴ Golius returned from the Levant in 1629 and was appointed professor of mathematics on 21 November 1629; he already was a professor of Arabic since May 1625; cf. *Bronnen tot de geschiedenis der Leidsche Universiteit.* ed. P. C. Molhuysen, 7 vols., The Hague: Nijhoff, vol. 2, pp. 120–121; 146–147.

The second item is the Dioptrique. In Paris Descartes had worked on optical (as well as mathematical) problems with Claude Mydorge (1585–1647).²⁵ Not only had he solved the problem of refraction; he had also written down his results in a form finished enough to be shown to Golius early in 1632: 'I am pleased that you are willing to do something similar with respect to the problem of refraction'26___ similar, that is, to what he had done with Descartes' Analyse. Also in 1632 Golius tells Huygens that the *Dioptrique* is finished, although there are some contrary claims in Descartes's letters to Mersenne.²⁷ In any case it is finished in the first week of April 1635 when Descartes reads parts of it to Huygens in Amsterdam.²⁸ Still, in 1632 there is obviously a first version of the Dioptrique, which either was entirely written during Descartes' first years in the Low Countries or which he brought with him when he came. The second hypothesis is by far the more likely. Descartes' correspondence with Ferrier shows that his first priority in Franeker was to work on a controlled and industrial way of grinding hyperbolic lenses.29 That problem is also an important subject in Descartes' correspondence with Huygens. 30 That means however that the theoretical basis was already laid and written down. Moreover, Descartes tells Ferrier that his invention was made 'after he left him'31—which may be false but shows that in Paris Descartes had not yet told others about it. Finally, Ferrier was not to share those things with Mydorge nor was he to show Descartes' letter to anyone else. Descartes is certain that even if other people are working

Descartes to Huygens, 11 December 1635, AT I, 599-600.
 Descartes to Golius, 2 February 1632, AT I, 237. Golius discusses Descartes' results in a letter to Huygens of 1 November 1632; see Huygens, Briefwisseling, ed. J. A. Worp, 5 vols., The Hague: Nijhoff, 1911–1916, vol. 1, pp. 371–375.

²⁷ 'Interea tamen significatum mihi fuit *Dioptrica* ejus, de quibus inter nos sermo fuit, ad finem esse perducta.' Golius to Huygens. 16 April 1632, Huygens, Briefwisseling I, 349; 'je suis resolu de ne point partir que la Dioptrique ne soit toute achevée. Descartes to Mersenne, June 1632, AT I, 254/CM III, 314.

²⁸ '... Monsieur de Zuylicom, que j'ai eu l'honneur de voir ces jours à Amsterdam, après avoir eu la patience d'ouir lire une partie de ma Dioptrique, s'est offert d'en faire faire lui-même quelque épreuve [...] Je suis trés marri de ce que ç'a esté vostre indisposition qui m'a osté l'honneur de vous voir cy devant a Amsterdam.' Descartes to Golius, 6/16 April 1635, AT I, 315. Descartes also had several private interviews with Huygens on the same subject; Descartes to Huygens, 1 November 1635,

²⁹ Descartes to Ferrier, 18 June 1629, AT I, 13-16; 8 October 1629, AT I, 32-37; Ferrier to Descartes, 26 October 1629, AT I, 38-52; Descartes to Ferrier, 13 November 1629, AT I, 53-69.

Descartes to Huygens, 5/15 April 1635, AT I, 585-586; Huygens to Descartes, 6 May 1639, AT I, 587-588, etc.

Descartes to Ferrier, 18 June 1629, AT I, 13.

on the same problem (Mydorge) their results will not be the same unless they manage to get hold of those letters to Ferrier.³² Accordingly Descartes' letters to Ferrier do contain a lot of new things, which Descartes in turn was eager to keep for himself.³³ So one of the projects Descartes took with him to the Netherlands was the *Dioptrique*, which he hoped to complete with the amazing piece of machinery described in the last chapter.³⁴ Moreover, in this case we have a very specific reason for not doing it in France, namely, that Descartes wanted to work on his own and eventually claim his invention as his own. Again, the time Descartes believed he would spend working on it was three years: 'I had attracted a boy to cook in the French way and decided not to leave [Franeker] within three years—all that time [Ferrier] could have worked on those glasses....'³⁵

The third project was a work on metaphysics. According to Baillet that was even the main reason why Descartes had left France: 'he had wished to consecrate his retreat from France into the Netherlands by a work of a few months, which however should be an eternal monument to his creator.'36 That is an exaggeration presumably for, as we have seen, Descartes did quite a few other things. Indeed, the fact that Descartes spent the first nine months of his stay in the United Provinces on metaphysics—as he claims in a letter to Mersenne³⁷ may be due to the fact that Ferrier preferred to remain in France and that there was very little else Descartes could do in Francker (which for that matter he exchanged for Amsterdam in the autumn of 1629).³⁸ Still, there is one piece of evidence, which cannot be neutralized. That is a letter to the Oratorian Guillaume Gibieuf (c. 1591–1650) of 18 July 1629.39 The letter survives as an autograph in the British Library. The letter was written in reply to a request made by Gibieuf for Descartes's father to intervene on his behalf in the Rennes

³² Descartes to Mersenne, 25 November 1630, AT I, 179-180; CM II, 561.

³³ Descartes to Ferrier, 18 June 1629, AT I, 15.

³⁴ AT VI, 211-227.

³⁵ Descartes to Mersenne, 18 March 1630, AT I, 129/CM II 414. The boy may be the 'Limousin' (see note 17).

³⁶ Baillet II, 100.

³⁷ 'Les 9 premiers mois que j'ay esté en ce pais, je n'ay travaillé à autre chose....' Descartes to Mersenne, 15 April 1630, AT I, 144/CM II, 430.

³⁸ Descartes may have left Francker any time between July 1629 and September 1629.

³⁹ Descartes to Gibieuf, 18 July 1629, AT I, 16–17. It was first published by Foucher de Careil.

Parliament. That Gibieuf is more familiar with Descartes than with Descartes's father (and that Descartes has a reason for being eager to please Gibieuf) is confirmed by the same letter:

I hope I can still bother you later when I have finished a small treatise I am starting now. I would not have mentioned it before it is ready but I am afraid that by that time you would have forgotten your promise to correct it and give it a last check; for I can't hope to have it ready in less than two or three years.⁴⁰

Neither Baillet nor Clerselier know about this letter. Nor is it a fraud—the handwriting is obviously Descartes's. But, given Gibieuf's own work, which was exclusively in theology, the work in question can hardly be anything but a metaphysical work. Again Descartes gives himself three years to finish it—as much time as he wanted to spend in Franeker working with Ferrier. But the basis of it had probably been laid earlier, for the letter shows that he had talked of it with Gibieuf when he was still in Paris.⁴¹ Apparently Descartes also talked of it with Golius, even if the work Golius refers to in a letter to Huygens may not be an early version of the *Meditations* but no more than a chapter of the more general work Descartes was writing on physics: 'The work he prepares, which now reaches the philosophy of the soul, which he derives from God, is awaiting a last touch; however it will be brief and dense, so as to excite more attention and demand more philosophical diligence.'⁴²

So we can identify three projects which Descartes took with him when he left France: an 'Algebra' (or 'Analyse' or 'Géométrie'), which he believed was finished, a 'Dioptrique,' which he hoped to complete by a machine for grinding lenses, and a 'Metaphysics,' which was still in its initial stage. This raises the question, first, why Descartes did not go back to France after his attempts to attract Ferrier failed; and, second, why he permanently settled in the Netherlands after 1633, when most of those projects were basically finished.

⁴⁰ '...ie me reserve a vous importuner lorsque i'auray achevé un petit traité que ie commance, duquel ie ne vous aurois rien mandé qu'il ne fust fait, si ie n'avois peur que la longueur du tans vous fist oublier la promesse que vous m'avés faite de le corriger et y adjouster la derniere main; car ie n'espere pas en venir a bout de deus ou trois ans...' Descartes to Gibieuf, 18 July 1629, AT I, 17.

⁴¹ See also Descartes to Mersenne, 4 November 1630, AT I, 174–175/CM III, 546. ⁴² 'Opus autem, quod molitur, ad humanae animae, cujus originem a Deo petit, philosophiam nunc perductum, extremam expectat manum; erit autem breve et pressum, ut attentionem et in philosophiando diligentiam majorem excitet.' Golius to Huygens, November 1632, *Briefwisseling* I, 375.

The reason why Descartes remained in 1629 was undoubtedly that before long his initial programme was enlarged with at least two other projects: The 'Météores,' which Descartes started to write at the end of 1629, and a general physics or 'Treatise on Light' (part of which became known as Le monde), which started to unfold slightly later, in 1630. When Descartes returned from Francker to Amsterdam (because he realized that Ferrier would not join him), or perhaps even earlier, Reneri showed him a report on the parhelia observed near Rome in March 1629. The fact that several other philosophers (among them Gassendi, who gave Reneri a copy of the original description when he came to visit him in Amsterdam)⁴³ tried to explain this phenomenon was a reason for Descartes to attempt his own explanation, which, however he found could be given only as part of a general explanation of all sublunar phenomena—that is, 'météores' (meteora). 44 But that plan, too, suffered delay because before long Descartes realized that these can be treated satisfactorily only on the basis of a general theory, which as yet he had not even written down: 'Since I wrote you one month ago all I have done is to make an outline, and instead of explaining no more than one phenomenon I decided to explain all natural phenomena, that is, the whole of physics.'45

Obviously Descartes has much difficulty in keeping himself to the second task, that of writing a general treatise of physics. On 18

⁴³ See my 'Gassendi et ses correspondants néerlandais,' in: *Quadricentenaire de la naissance de Pierre Gassendi 1592–1992*, 2 vols., Digne-les-Bains: Société scientifique et littéraire des Alpes de Haute-Provence, 1994, vol. I, pp. 99–110.

⁴⁴ 'Et comme je ne trouve jamais rien que par une longue traisnée de diverses considérations il faut que je me donne tout à une matiere, lors que j'en veux examiner une partie. Ce que j'ai éprouvé depuis peu en cherchant la cause de ce phainomene duquel vous m'écriviez, car il y a plus de deux mois qu'un de mes amis m'en a fait voir ici une déscription assez ample, et m'en ayant demandé mon avis, il m'a fallu interrompre ce que j'avais en main pour examiner par ordre tous les météores, auparavant que je m'y sois pû satisfaire. Mais je pense maintenant en pouvoir rendre quelque raison et suis résolu d'en faire un petit Traitté qui contiendra la raison des couleurs de l'arc-en-ciel, lesquelles m'ont donné plus de peine que tout le reste et généralement de tous les phénomènes sublunaires.' Descartes to Mersenne, 8 October 1629 (date of the exemplaire de l'Institut, based on the autograph), AT I, 22–23; CM II, 300.

⁴⁵ 'Car depuis le temps que je vous avais écrit il y a un mois, je n'ai rien fait du tout qu'en tracer l'argument et au lieu d'expliquer un phénomène seulement, je me suis résolu d'expliquer tous les phénomènes de la nature, c'est-à-dire, toute la physique.' Descartes to Mersenne, [13 November 1629], AT I, 69–70/CM II, 15. There is an incomplete autograph of this letter, without date, this being established by the reference to another letter written 'il y a un mois.' And that is the letter of 8 October, whose date can be fixed with the help of the Exemplaire de l'Institut. Still, both dates remain to a certain extent conjectural.

December he asks Mersenne not to write again, telling him that he is no longer interested in having Ferrier with him and wants to spend one or two months at serious work: 'for one or two months I want to do some serious work; what is written down of my treatise would occupy less than half of this letter and I am deeply ashamed of it.'46 Two months later he is not yet beyond what is now the subject of chapter 4 of Le monde.⁴⁷ In April he admits that he is going slowly but 'that does not prevent me from finishing the small treatise I started but I don't wish that others know about it in order for me to be free to denounce it.'48 Finally, in July 1633 the treatise is 'almost finished' despite the fact that, as Descartes had told Mersenne in an earlier letter, the result is no more than 'an abridged version' (quasi un abrégé). In fact, correcting and copying the draft cost so much time and trouble that in November 1633 there will be a neat copy of the first half only.49

Accordingly, the reason why Descartes did not return to France even after it became clear that Ferrier would not join him was presumably that he had plenty to do and possibly that he was afraid of being unable to finish any of his projects in France. The reason why Descartes settled permanently in the Low Countries may have been the friends he had made. It is unlikely that before 1629 Descartes knew anybody but Beeckman. Even with him, apparently, relations had not been very close, for when Descartes came to Dordrecht in 1628 he did not even know that Beeckman no longer lived in Middelburg: 'Mr René Descartes du Perron [...] came to see me in Dordrecht on 8 October 1628 after he had gone in vain from Holland to Middelburg to call on me.'50 More particularly, Descartes

⁴⁶ 'car j'ay envie de me mettre un mois ou deus a travailler tout de bon: je n'ay pas encore tant escrit de mon traité qu'il y a d'escriture en la moitié de cette lettre, et j'en ay grand honte.' Descartes to Mersenne, 18 December 1629, AT I, 104/CM II, 353. Admittedly this is a very long letter, occupying twenty pages of the Correspondance de Mersenne.

⁴⁷ Descartes to Mersenne, 25 February 1630 ('Ce 12e jour de caresme 1630'), AT I, 115-124/CM II, 392-399.

⁴⁸ Descartes to Mersenne, 15 April 1630, AT I, 137-147/CM II, 423-424.

⁴⁹ Descartes to Mersenne, 22 July 1633, AT I, 268/CM III, 459; 25 November 1630, AT I, 179/CM II, 561; 28 November 1633, AT I, 270/CM III, 557. ⁵⁰ 'D. Renatus des Cartes du Perron [...] die 8° mensis octobris 1628 ad me

visendum venit Dordrechtum, cum prius frustra ex Hollandia Middelburgum venisset, ut me ibi quaereret.' Beeckman, Journal, ed. Corn. de Waard. Presumably Descartes arrived by ship in Rotterdam or Dordrecht (that is, in the province of Holland) on 6 or 7 October, then went to Middelburg (Zeeland) and came back to Dordrecht on 8 October.

probably did not realize that after he left the Netherlands Beeckman was married (in 1620) and could not live with him—hence possibly the uncertainty about Descartes's plans reflected in Beeckman's report of this visit. Before long, however, Descartes became acquainted with André Rivet (1572–1651), presumably through the intermediary of Beeckman.⁵¹ But it is not necessary to suppose that there was any Dutch intermediary given the fact that all French academics visiting the Netherlands almost automatically went to visit Rivet, who was often seen as an unofficial ambassador of France.⁵² So much is clear, Rivet was instrumental in introducing Descartes to the world of Dutch academics, as Mersenne gratefully testifies: 'I thank you for the good reputation you have given Mr Descartes, as he has written me several times. . . . '53

One of the people Rivet almost certainly introduced to Descartes is Henricus Reneri (1593–1639). Having fled Louvain, where he prepared for the priesthood (which became impossible after he converted to Calvinism), Reneri came to Leiden, where he studied at the 'collège wallon,' the theological seminary of the French Huguenots, and became a protégé of Rivet. But his real interest was philosophy and it is with respect to optical problems that he first makes an allusion to Descartes in a letter to Huygens as 'that French Nobleman' (Nobilis ille Gallus) interested in optics.⁵⁴ He never was a Cartesian in the ordinary sense of the word but he sympathized with the new philosophy in general.

⁵¹ 'Quant au probleme que j'avois proposé à M^{sr} Becman, je n'ay point de souvenance que le gentilhomme dont vous parlez, m'en ayt satisfait et ne sçay quel il peut estre, si ce n'est M^{sr} de Cartes....' Mersenne to Rivet, 28 February 1629, CM II, 205.

⁵² André Rivet, a French protestant theologian, was a very influential man, not only among French Huguenot refugees, but also in the Dutch theological world generally. He became professor of theology in Leiden in 1620. In 1632 he was appointed (as governor of the young Prince of Orange, later William II) to the household of the Stadholder. In 1646 the Stadholder gave him the direction of the newly founded Illustrious School in Breda. Most of his voluminous correspondence is kept in Leiden University Library; for an inventory see Paul Dibon/H. Bots/E. Bots-Escourgie, *Inventaire de la correspondance d'André Rivet*, The Hague: Nijhoff, 1971.

⁵³ 'Je vous remercie de la bonne odeur où vous avez mis M. Descartes selon qu'il m'a récrit; qui est le gentilhomme le plus savant et le mieux né que je vis jamais.' Mersenne to Rivet, 13 September 1629, CM II, 269.

⁵⁴ Reneri (Amsterdam) to [Huygens], 28 March 1629 (date on the autograph), AT X, 541–542. AT's conjecture that the addressee is Huygens is probably right given the fact that he is addressed as 'amplissime vir' (which is used for officials such as Huygens), that he is interested in optics (as is Huygens) and that he lives in The Hague (as does Huygens).

Then there was Constantiin Huygens (1596–1687), lord of Zuylichem and Zeelhem. Like his father Christiaan (1551-1624), who was a secretary of William of Orange, and his son Constantijn (1628–1697), who would be secretary of William III, Huygens was secretary of a Stadholder (in his case Frederick-Henry, Prince of Orange, and after the death of his son, William II), travelling with the army during the summer, living in The Hague whenever the Stadholder was in residence and enjoying what little leisure he had in the elegant small castle he built in Voorburg, close to The Hague, which he called 'Hofwijck'—'Escape from the Court.' But he was also a man of letters in the broad Renaissance sense of the word, a virtuoso fluent in Dutch, French, English, German, Italian, Latin and Greek, writing hundreds of poems in many of those languages, composing music (songs and sonatas) and being interested in scientific subjects. 55 Although the first surviving letters between him and Descartes date only from 1635 it is certain that Descartes knew him personally sometime in 1632, probably earlier.⁵⁶ In any case, relations between Descartes and Huygens became firmly established in May 1632.57 The initial basis of their friendship was their shared interest in optics. Huygens, who during his visit to England in 1622 made the acquaintance of Cornelis Drebbel (1572–1633), was interested in Descartes' project of finding a controlled way of grinding hyperbolic lenses.⁵⁸ He encouraged

⁵⁵ See the papers collected in: Constantijn Huygens: Zijn plaats in geleerd Europa, ed. Hans Bots, Amsterdam: University Press Amsterdam, 1973. Huygens's poems—among them several in honour of Descartes—are readily available now on the internet (http://iias.leidenuniv.nl/huygens/home.html).

⁵⁶ 'Ex quo postremum a te abii, vir doctissime atque amicissime, secuta me imago est mirabilis Galli, amici non extra invidiam meam tui, cujus in magna urbe paulatim sepultae distat inertiae celata virtus.' Huygens to Golius, 7 April 1632, Huygens, *Briefwisseling* I, 348.

⁵⁷ 'Je ne sçay que respondre a la courtoisie de Monsieur Huguens, sinon que je cheris l'honneur de sa connoissance comme l'une de mes meilleures fortunes....' Descartes to De Wilhem, 23 May 1632, AT I, 253–254.

⁵⁸ On Huygens's relations to England and the English see A.G.H. Bachrach, Sir Constantine Huygens and Britain, Leiden: Sir Thomas Browne Institute, 1962 (until 1619). On Huygens's interest in optics see W. Ploeg, Constantijn Huygens en de natuurwetenschappen, Rotterdam: Nijgh en Van Ditmar, 1934 (Ph.D. diss. Leiden University). Cornelis Drebbel was an instrument maker who in 1605 went to London and entered the service of the Prince of Wales, mainly for the production of fireworks. He developed a machine for grinding lenses, experimented with the camera obscura and made what seems to be one of the first microscopes. Huygens had an open mind on whether hyperbolic lenses are better than circular ones (which were defended by a Dutch philosopher, Martinus Hortensius, 1605–1639); see his letters, written on two successive days, to Descartes and Hortensius respectively: 'On me dit que le sieur Hortensius prétend nous satisfaire en la parfaicte demonstration des verres

Descartes to publish the *Discours*, putting at his disposal the diplomatic bag to forward parts of the printed text to Paris for a 'privilège' and (with his wife Suzanna van Baerle) carefully checking the printed sheets.⁵⁹

The person however who brought Descartes and Huygens together was presumably Jacobus Golius (Jacob van Gool), a professor of oriental languages and mathematics in Leiden. As we already saw, it is because of him that Descartes temporarily settled in Leiden and it is to him that he submitted his first essays. Golius spent part of the Easter holiday of 1632 with Descartes—originally Descartes would come to Leiden⁶⁰—and visited Descartes in Deventer.⁶¹

Finally Descartes became friends with David le Leu de Wilhem (1588–1658), a brother-in-law of Huygens (he married his sister Constantia) and like him a high government official—he was member of the State Council (*Raad van State*) and from 1634 also of the Council of Brabant (*Raad van Brabant*).⁶² De Wilhem also knew Golius, whom he had met during his second journey to the Levant in 1625, where both were hunting for manuscripts and antiquities. Being very wealthy De Wilhem was known as a patron—his correspondence with Reneri shows that he often gave him money to buy books⁶³—

circulaires, exclusivement à toute autre figure....' Huygens to Descartes, 28 October 1635, AT I, 591 (forwarded by Reneri); 'obsecro te vero, ut, si fas est, aliquid mihi tam pulchrarum demonstrationum palam fiat, quibus inclusisse negotium omne diceris et, hyperbola denique, quam Gallus noster, et parabola, quam alii adstruunt, exclusa, soli circulo tribuere, quae tam nobilis inventa infinita, meo judicio, potestas et sequela est.' Huygens to Hortensius, 29 October 1635, *Briefwisseling* II, 120 (AT I, 328).

⁵⁹ The 'errata' of the first edition of the *Discours* are no doubt the fruit of these efforts; cf. Matthijs van Otegem, *A Bibliography of the Works of Descartes (1637–1704)*, 2 vols., Ph.D. diss. Utrecht University, vol. I, pp. 4–12.

⁶⁰ Huygens to Golius, 7 April 1632, *Briefwisseling I*, 348; Golius to Huygens, 16 April 1632, *Briefwisseling I*, 349.

¹⁶¹ 'Ita de se testatur nobis ipse philosophus, cujus dulcissima consuetudine pridem mihi licuit per biduum frui... Ipse nunc Daventriae secessit, ut se turbae et compellationibus eximat et postea se fructuosis omnibus impertiat....' Golius to Huygens, 1 November 1632, *Briefwisseling* I, 371–375.

⁶² The Council of Brabant was the body instituted for the administration of North Brabant (the South remained in Spanish hands). Probably because most of the population were Roman Catholic, the other provinces decided not to admit the newly conquered territory on the same footing as themselves but to have it governed, in their name, by the States General (for which reason this part of the country was known as the 'Generaliteitslanden').

⁶³ Reneri's letters to De Wilhem are in Leiden University Library (MS Dept., BPL 297 A).

and it is not impossible that he also financially supported Descartes.⁶⁴ In any case he advanced him money, a gesture no doubt facilitated by the fact that his brother Paul was a banker.⁶⁵

But apart from those friends, who may have made it worthwhile for Descartes to stay a bit longer, it is also clear that the work on what is now known as *Le monde* cost much more time than he foresaw when he started it. The correspondence shows that this delay was caused by a number of factors. First of all, there is much evidence—in part already reviewed—that Descartes continued his work on other projects (mathematical, meteorological and optical). He was also engaged in chemical and anatomical studies: 'I now study chemistry and anatomy and every day I learn something one could not find in any book.' Vopiscus Fortunatus Plempius (1601–1671) describes how he met Descartes dissecting animals:

I intimately knew that man in Amsterdam before Her Highness Isabella appointed me to the chair of Louvain⁶⁷ [...] Unknown to everybody he lived in the house of a wool merchant in the Kalverstraat. There I saw him more than once, surprised that he was a man who neither possessed nor read books but was intent only on committing his meditations to the paper, sometimes also dissecting animals—in brief as Hippocrates found Democritus in Abdera.⁶⁸

⁶⁴ According to Bayle (Dictionnaire, s.v. 'Wilhem') De Wilhem took pleasure in protecting and supporting scientists and philosophers. In Martin Schoock's *Admiranda methodus* (Utrecht: Van Waesberge, 1643; translated in my *La querelle d'Utrecht*, Paris: Les impressions nouvelles, 1988) there are various allusions to the effect that Descartes was financially supported by powerful Dutch magistrates.

⁶⁵ Descartes to De Wilhem, 23 May 1632, AT I, 253-254.

⁶⁶ Descartes to Mersenne, 15 April 1630, AT I, 137/CM II, 423.

⁶⁷ Plempius was appointed in Louvain in 1633. He also tells his readers that the intermediary between him and Descartes was a mutual friend, Johannes Eylichmann. In the latter's *liber amicorum* (now in the Wellcome Library London) there is an Arabic inscription by Plempius, d.d. Amsterdam 20 May 1631. Plempius (the name 'Vopiscus Fortunatus' indicates that he was the surviving half of a twin) belonged to an important Roman Catholic family of Amsterdam.

⁶⁸ 'Ego illum Virum Amstelredami antequam ad cathedram Lovaniensem a serenissima Isabella vocatus sum, familiariter novi.... Nulli notus in pannarii mercatoris se abdidit, sitam in platea quae a vitulis nomen habet. Ibi ego illum saepicule invisi: offendi semper hominem nec libros legentem neque habentem; solis intentum meditationibus easque chartae mandantem; aliquando etiam animalia secantem, perinde uti Hippocrates circa Abderam reperit Democritum.' Vopiscus Fortunatus Plempius, Fundamenta Medicinae, 3rd ed., Louvain: Nempaeus, 1652, p. 375 (AT, I, 401).

And it is also confirmed by Descartes himself:

When I spent a winter in Amsterdam I went almost every day to the house of a butcher to see him kill his animals and sometimes had him bring the parts which I wished to anatomize at ease; and that is what I have done often since, wherever I was.⁶⁹

The second reason was presumably that Descartes had much difficulty finding the right format. Apparently that problem did not exist with respect to the smaller works he composed or finished during the same period: the Géométrie, the Dioptrique and the Météores. It will not be a problem either for the Treatise on man (detached from Le monde, extensively rewritten after 1633 and definitively reconstructed and copied in 1641 or 1642) and the Description of the human body (1648). The problem with those works is not form or presentation but contents or, as Descartes says, observations and experiments.⁷⁰ The problems Descartes faced when writing his more general works, however, had to do with form and presentation. Since he could not start with simply stating his principles (which from a traditional point of view were arbitrary), nor make an appeal to common experience (which on the contrary he left behind), he could hardly avail himself of the literary forms of the philosophical tradition. Accordingly Le monde with its 'fable,' of which stroke of genius Descartes was justly proud⁷¹ but also the Metaphysical meditations (1641) with their famous doubt 'experiment'—can also be seen as stylistic experiments. This caused Descartes so much difficulty that his reaction to the news of Galileo's condemnation seems to be one of relief rather than shock—indeed, from now on he has an excuse for concentrating on 'a few subjects which without being too controversial, nor making it necessary to reveal my principles more than I care, would nonetheless sufficiently show what things I can, or cannot, achieve in the sciences."72

⁶⁹ 'J'ay esté un hyver à Amsterdam, que j'allois quasi tous les jours en la maison d'un boucher, pour luy voir tuer des bestes, et faisois apporter de là en mon logis les parties que je voulois anatomiser plus à loisir; ce que j'ay encore fait plusieurs fois en tous les lieux où j'ay esté....' Descartes to Mersenne, 13 November 1639, AT II, 621/CM VIII, 610.

⁷⁰ Cf. Discours V, AT VI, 45; VI, AT VI, 63–65; Principia IV, art. 187, AT VIII-1, 314–315, etc.

⁷¹ '... car la fable de mon monde me plaist trop pour manquer à la parachever.' Descartes to Mersenne, 25 November 1630, AT I, 179/CM II, 561.

⁷² Discours VI, AT VI, 75.

It is difficult to probe the hearts and minds of other people, especially if they are dead. It is particularly difficult in the case of Descartes, who is usually evasive about his motives or dresses them up as literature.73 All one can do is collect whatever facts can be known, review them carefully and, if possible, arrive at a conclusion, which, however, will never be more than tentative and at best morally certain. Those facts may be extremely trivial. In the case of Descartes in particular I am inclined to think that there is one fact that could serve as an additional explanation of most of the things we have seen. Since Descartes had sold his property in 1622-1623, he had nowhere to go.74 Unless he wanted to set up his own household (for which he probably lacked the money), he could live in France only as the permanent guest of a relative: his father and, after his death in 1640, his elder brother (whom he did not like) or otherwise someone like Marguerite Ferrand. In the Netherlands he could live independently and at smaller expense than in Paris. And even if Francker was situated at the edge of the civilized world, from most other places in the country it took only a few hours to be in Amsterdam, Leiden or The Hague—where Descartes went frequently. Although as a foreigner he did not have to conform to the implicit rules that governed the behaviour of his class, he could live as a Frenchman, if necessary enjoy the protection of the French Ambassador and perform his religious duties, without being under any social obligation—even his best friends did not mind if he was not visible for some time. Moreover, unlike Descartes' French friends, who were men of leisure and were often engaged in the same type of scientific endeavour as himself, his Dutch friends were busy people. More importantly perhaps, they were eager to learn without trying to know better. All those things which carried enough weight to keep him in a foreign country. Descartes learned them only when he was here they were of no consequence for his decision to come to the Low Countries but were all-important in his decision (if there ever was any 'decision') to remain.

For example in his famous letter to Balzac of 5 May 1631 (AT I, 202-204).
 Baillet I, 116; II, 460 (referring to various contracts). I admit that creates

another problem: Why at the age of 26 did he sell most of his property? In any case it means that even at that age he still had no intention to marry.

FOUCHER'S ACADEMIC CARTESIANISM

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In the second century B.C., when Arcesilaus became its head, Plato's Academy became skeptic. He and the following heads of the Academy up to Philo of Larissa are called the "Academic skeptics" for having argued for and against all philosophical doctrines and held suspension of judgment (épochè) about any knowledge claim. To differentiate their philosophical position from Plato's, the Academy of Arcesilaus and his followers has been labeled "the new Academy." The Academics, however, considered themselves genuine heirs of Plato and we can say neither that Arcesilaus ignored Plato's works nor that he rejected them. The historical fact is that at least until Cicero's time there was a well established tradition of interpreting Plato as close to one of the varieties of what we call today "skepticism". Cicero testifies to the fight within the Academy at his time on the nature of Plato's philosophy finally won by Antiochus's view of Plato as a dogmatist (in

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¹ According to Diogenes Laertius, Arcesilaus "would seem to have held Plato in admiration, and he possessed a copy of his works." Diogenes Laertius, *Lives of Eminent Philosophers*, 2 vols., tr. R. D. Hicks, Loeb Classical Library (Cambridge, MS: Harvard U. Press, 1972), IV.32.

This interpretation emphasized the role of Socrates in Plato's dialogues and the aporetic nature of the so-called Socratic dialogues. Julia Annas ('Plato the Skeptic', in J. Klagge and N. Smith, eds., *Methods of Interpreting Plato and his Dialogues*, Oxford Studies in Ancient Philosophy, supplementary volume, Oxford: Oxford U. Press, 1992) argues convincingly that the *Thaetetus* must have played an important role in this interpretation. Indeed, in this late dialogue 1– the character of Socrates is even more remarkable than in the Socratic dialogues; 2– there is the most detailed statement of Socrates' maieutics; 3– the topic is knowledge, the largest part of it on sense perception and its skeptical problems; and 4– the dialogue is aporetic, arriving at no satisfactory definition of knowledge.

the sense of holding positive views).³ Reading Plato as a kind of skeptic becomes more difficult after the neo-Platonic movement and almost impossible after Ficino's edition of his metaphysical-religious Plato. In the seventeenth century, however, the "skeptical" interpretation of Plato was not as implausible as it seems to be today.⁴

Simon Foucher (1644–1696) is a very little known philosopher of the late seventheenth century. Only two books have been published about him: one in the nineteenth century by the Abbé Rabbe and the other by Richard Watson in 1966.⁵ Foucher's project was, however, ambitious: to recover and update the Academic tradition, rescuing Plato from the "hyperbolic" (to use Leibniz's expression) appropriation of his thought by religiously minded humanists, notably Ficino.⁶ In

³ Cicero, Academica. Tr. H. Rackham, Loeb Classical Library (Cambridge, MS: Harvard U. Press, 1979, 1st. edition 1933), I.15–18 and 43–46. Sextus Empiricus also refers to this dispute on the nature of Plato's philosophy, naming among those who consider Plato as holding épochè Aenesidemus (a contemporary of Cicero and Antiochus) and Menodotus (a skeptic who flourished in the second century A.D.). (Sextus Empiricus, Outlines of Pyrthonism, tr. R. G. Bury, Loeb Classical Library. Cambridge, MS: Harvard U.P., 1990, I.222).

⁴ Although I am not a scholar of ancient philosophy, I shall venture to say that the plausibility of the skeptical reading of Plato can be sustained even in a doctrinaire dialogue such as the *Phaedo*.

⁵ F. Rabbe, Etude philosophique. L'Abbé Simon Foucher, chanoine de la Sainte-Chapelle de Dijon (Paris: Didier, 1867) and Richard A. Watson, The Downfall of Cartesianism: A study of epistemologial issues in late seventeenth- century Cartesianism (The Hague: Martinus Nijhoff, 1966), second expanded edition, The Breakdown of Cartesian Metaphysics (Atlantic Highlands, NJ: Humanities Press, 1987). Watson shows that Foucher's criticism of Malebranche and the Cartesian way of ideas was key in the development of early modern philosophy from Bayle and Leibniz to Berkeley and Hume. See also Richard H. Popkin, 'L'Abbé Foucher et le problème des qualités premières', Bulletin de la Societé d'Etude du XVII' Siècle 33 (1957), 633–647.

⁶ In a letter to Foucher of 1686, Leibniz says that «Lipse et Scioppius ont taché de ressusciter la philosophie des Stoïciens; Gassendi a travaillé sur Epicure; Schaeferus a ramassé ce qu'il a pû de la philosophie de Pythagore; Ficinus et Patritius ont ensuivi Platon, mais mal à mon avis, parce qu'ils se sont jetés sur les pensées hyperboliques, et ont abandonné ce qui estoit plus simple et en même temps plus solide. Ficinus ne parle partout que d'idées, d'Ames du monde, de Nombres Mystiques et choses semblables, au lieu de poursuivre les exactes definitions, que Platon tache de donner des notions. Je souhaitterois que quelqu'un tirât des anciens le plus propre à l'usage et le plus conforme au goust de nostre siecle, sans distinction de secte, et que vous en eussiés le loisir, comme vous en avés la faculté, d'autant que vous les pourriés concilier et même corriger quelque fois, en joignant quantité de belles pensées de vostre fonds» (Die philosophischen Schriften von Leibniz, ed. Gerhardt, Erster Bande, Berlin: Leibmannische Buchhandlung, 1875, pp. 380-381). Putting it in contemporary philosophical terminology, Leibniz asks Foucher to give an "analytical" reconstruction of Plato to counterbalance Ficino's "metaphysical" one. This anticipates, in fact, contemporary analytic Anglo-Saxon Plato scholarship. Note that corrections of views held by previous Academics is a procedure, according to Foucher,

this paper I focus on the role played by Descartes in this project. I develop and detail the following more recent statement of Watson's about Foucher's philosophical outlook: "Foucher was something of a Cartesian in his adherence to the method of doubt in the search for knowledge, but he eschewed the dogmatism of doctrinaire Cartesians, among whom he ranked Malebranche."7 There is no doubt that it was Descartes and the Cartesians (the latter, negatively) who motivated Foucher to try to rehabilitate the Academic tradition. The question I propose to deal with here concerns the extent and nature of Foucher's "Cartesianism". Foucher's relation to Descartes may have been very similar to Arcesilaus' relation to Plato.8 As Arcesilaus, according to Cicero (Ac I.15-18), assumed épochè to contravene the Stoic dogmatic development of Plato, so Foucher reacted to contemporary Cartesians, notably Malebranche, who were developing dogmatic views from Descartes. Foucher thus endeavors to preserve the non-dogmatic aspect of Descartes in the same way that Arcesilaus endeavored to do concerning Plato. The fight of Arcesilaus in antiquity and of Foucher in modernity is ultimately the same, namely, to preserve the same sound philosophy—Academic skepticism—which both took to be the true philosophy of these two major names of ancient and modern thought (even if Plato and Descartes eventually departed from it). Foucher does so not by combating Stoics and Epicureans, but the "Cartesians," and by taking the Academic legacy further than Descartes did by avoiding Descartes's mistakes.9 If it is true

entirely in agreement with the Academic tradition according to which truth prevails over authority. In order to be considered a head of the Academy, a philosopher must deduce new views from his predecessors (Cf. S. Foucher, Dissertation sur la Recherche de la verité contenant l'Histoire et les Principes de la Philosophie des Academiciens, avec plusieurs réflexions sur les sentimens de M. Descartes. Paris: Jean Anisson, 1693, p. 67).

⁷ Watson makes this statement in the Introduction to his translation of Foucher's Critique de la recherche de la vérité, Malebranche's First and Last Critics, Journal of the History of Philosophy Monograph Series, (Carbondale: Southern Illinois U.P., 1995), p. 6.

⁸ Because Arcesilaus—following Socrates—wrote nothing and we do not have many sources for his views, it is hard to determine his precise evaluation of Plato.

⁹ Rabbe interprets as hostile to Descartes Foucher's claim that part of Descartes's philosophy belongs to the Platonic (in the sense of Academic) tradition (op. cit., p. 24), which is certainly true of Huet's similar point, but not of Foucher's. True, Foucher, like Huet, considers arrogant Descartes's claim of total rupture from the philosophical tradition. However, he does not deny the originality of Descartes in recovering the Academic tradition in a new context, that of the crisis of scholasticism and the rise of the new science, which context determined positions different from those held by the ancient Academics. Furthermore, how could his claim be negative if Foucher places himself in this tradition?

that Foucher is the main one responsible for what Watson calls the "downfall of Cartesianism," this should be understood more precisely as the "breakdown of Cartesian *metaphysics*," as Watson says in the new title of the second edition of his work.¹⁰

Foucher published nine philosophical works.¹¹ Excepting two specifically on ethics, the remaining seven have in their title or subtitle a reference to the Academics and another to Descartes or the Cartesians. The first one was published either in 1673 (according to Papillon, who apparently saw the book) or in 1672 (according to Foucher in a letter to Leibniz). Unfortunately there is no available known copy of this publication. Foucher refers to it in a letter to Leibniz of 8 December 1684.

I don't know if you have heard of the Logique des Academiciens. It is a book that I had printed more than a year before the first volume of Malebranche's Search had appeared. This Logique is thick, roughly like the first book I spoke of [La Sagesse des Anciens]. It is what led me to do the Critique. This Logique is spoken of on the first page of the Critique under the title of dissertations. I have no more copies of it, and I had only a few copies of it printed solely to send to specialists. 12

This Logic probably detailed the method of the Academics' summarized by Foucher in five rules in the several *Dissertations sur la recherche de la vérité* he published after this first one. These rules are (1) to conduct oneself only by demonstrations; (2) to not raise issues which we see we cannot resolve; (3) to recognize that one does not know that of

¹⁰ I have argued in 'Academic Skepticism in Modern Philosophy', *Journal of the History of Ideas* 58:2 (1997), pp. 199–220, that Foucher's main philosophical target is Malebranche rather than Descartes and that he, no more or no less than Malebranche, can be considered a "Cartesian" provided one keeps in mind Foucher's opposition to any sectarianism around a philosopher, that his adhesion is to Cartesian method or logic and not doctrines, and that he attributes to the ancient Academics his Cartesian way of philosophizing.

The complete list is in Watson, Breakdown, pp. 226-227.

¹² Letter from Foucher to Leibniz, 8 December 1684 in Gerhardt (ed.), Die philosophischen Schriften von Leibniz, p. 378. Foucher refers three other times to this work, telling Leibniz he has no extra copies to send him and insisting that it was published (although not entirely completed) before Malebranche's Recherche. See letters of 5 May 1687 (op. cit., pp. 389–90), 30 May 1691 (pp. 398–99) and a undated one probably from the end of 1685 according to Gerhardt (p. 379). Papillon gives the following title: Dissertation sur la Recherche de la Verité, ou sur la Philosophie des Académiciens, où l'on réfute les préjugez des Dogmatistes, tant anciens que nouveaux: avec un examen particulier des sentimens de M. Descartes. He adds in a note that it «contient les Dissertations sur la Logique des Académiciens» (Bibliotheque des Auteurs de Bourgogne, 2 vols., Dijon: François Desventes, 1745, Vol. 1, pp. 222–225).

which one is in fact ignorant; (4) to draw a clear difference between the things one knows and those one does not know; and (5) to search always for new knowledge. 13 Foucher says these laws correspond to Descartes's method. The fourth corresponds to Descartes's second rule of method in the Discours, 14 and the crucial first one to Descartes's first rule of "never to accept anything as true if I did not have evident knowledge of its truth: that is, carefully to avoid precipitate conclusions and preconceptions."15 This rule is key in Foucher's Academic Cartesianism. It is the positive statement of Descartes's methodic doubt: an active doubt designed to expurgate all acquired opinions that obscure the natural light of reason and therefore compromise "the search after the truth." 'Precipitate conclusions' and 'preconceptions' are the two specific targets of the Academics, from Socrates to Carneades. Once properly followed, this rule or methodic doubt provides the emancipation of attachment to the senses and material things (matters which are not capable of demonstration), opening up the way to the discovery of purely intellectual truths. Indeed, Foucher says that the Academic fifth rule to search always for new knowledge was Descartes's "first principle," since the cogito presupposed this more basic rule (Histoire, p. 92). This "first principle" is very important in Foucher's project of rehabilitating the Academy, for it contravenes the commonly held view that the Academics deny that truths may be known.¹⁶ It also is a significant sign of Descartes's role in this project. Foucher thus calls most of his philosophical works "dissertations on the search after the truth."

¹³ Foucher, Dissertation sur la Recherche de la Verité contentant l'Apologie des Academiciens. Où l'on fait voir que leur maniere de Philosopher est plus utile pour la Religion, & la plus conforme au bon sens. Pour servir de Réponse à la Critique de la Critique, &c. Avec plusieurs remarkes sur les ERREURS des SENS & sur l'Origine de la Philosophie de Monsieur Descartes (Paris: Estienne Michallet, 1687), pp. 5–8.

¹⁴ «Il semble que Mr. Descartes ait voulu proposer cette loy, en disant qu'il faut diviser les choses en plusieurs parcelles: afin de les connoitre les unes après les autres & de sçavoir que nous connoissions celles-cy par example, & qu'il nous reste à connoitre celles-là» (*Apologie*, p. 55).

¹⁵ René Descartes, *Oeuvres*, ed. Ch. Adam and P. Tannery (Paris: Vrin, 1983), vol. VI, p. 18. English translation by J. Cottingham, R. Stoothoff, and D. Murdoch, *The Philosophical Writings of Descartes*, 2 Vols. (Cambridge: Cambridge University Press, 1985), Vol. 1, p. 120.

¹⁶ Tradition has the Academics claiming that there is no truth to search since it is inapprehensible. Those most responsible for the attribution of this view to the Academics are the Stoics and Sextus Empiricus (*Outlines of Pyrrhonism*, I.3). Cicero denies the charge (Ac II.7) and argues that *acatalepsia* is an *ad hominen* argument against Stoic epistemology (Ac II.77–78).

Just one or two years after the publication of Foucher's Dissertation sur la recherche de la vérité ou la Logique des Academiciens Malebranche publishes his own De la Recherche de la Verité whose aim, as stated in the subtitle, is precisely to avoid errors in the sciences. Foucher could not remain indifferent to Malebranche's Recherche de la Verité and proposes his Critique de la Recherche de la Vérité as an aid in his and Malebranche's "recherche de la vérité" (Critique, p. 15). To search after the truth is after all one of the Academic laws and to avoid error is the supreme interest of the Academics (Ac II.66 and 68). However, unlike Descartes, Malebranche not only does not present the laws in his book but, worse, systematically violates them. According to Foucher, Malebranche's Recherche de la Verité contradicts specifically the first basic rule of accepting only demonstrations. Foucher's Critique consists of critical examination of seven "suppositions" and six "assertions." Both are instances of views that Malebranche takes as true without demonstration.¹⁷ For the Academics everything which is neither evident nor demonstrated is an "opinion," precisely what should be eliminated by methodic doubt or the Academic laws in order to proceed in the search after the truth.

Foucher's reaction to Malebranche shows his place in the ancient but above all in the modern skeptical tradition.¹⁸ I have shown elsewhere that Montaigne was crucial for early modern skepticism, among other reasons for presenting épochè as the mental state most favourable to the perfect functioning of reason.¹⁹ Montaigne says the ancient Skeptics "se servent de leur raison pour enquerir et pour debatre, mais non pas pour arrester et choisir."²⁰ Reason stops when the apparent plausibility of a dogma leads the philosopher to stop his inquiry and give his assent to what he takes to be the truth (precipitate conclusion). Once assent is given, reason may proceed to act when confronted by some conflicting opinion. But then it will be biased in favor of its own previously held opinion (preconception). Avoidance of precipitate conclusion and of preconception thus enables the recovery

¹⁷ For detailed commentary see Watson, *Breakdown*, pp. 57–77.

¹⁸ Sextus says that only the skeptics (which etymologically means 'inquirers') search after the truth, for the dogmatists believe they have already found it (PH I.1-2).

¹⁹ 'Epochè as Perfection: Montaigne's View of Ancient Skepticism', to appear in the proceedings of the conference "Skepticism as a Force in Renaissance and Pos-Renaissance Philosophy", Clark Library, March 2002.

²⁰ Montaigne, 'Apologie de Raymond Sebond', *Essais*, ed. P. Villey (Paris: Quadrige/PUF, 1965, 3rd. ed. 1999), II.12, p. 520.

of the purity of the natural light, its proper natural function. Intellectual integrity, the basic Academic commitment, is reached through épochè or doubt.²¹ This view is exhibited by La Mothe le Vayer and the Gassendi of the Exercitationes, whose first book explores the theme of the libertas philosophandi precisely around the idea that suspension of judgment means freedom from authority, which inhibits philosophical inquiry.²² Descartes builds on this modern skeptical tradition (in particular, on Charron's Sagesse) to propose the very idea of a methodic doubt, that is, doubt as the means to recover the integrity of reason from its meddling with unjustified opinions. Foucher thus finds Malebranche in opposition to the modern (in fact, old) philosophical tradition from Montaigne to Descartes. It is his view (and Montaigne's, Charron's, La Mothe le Vayer's, Gassendi's and last but not least Descartes's) that "l'opinion exclut la recherche de la vérité" (Apologie, p. 59) which leads him to react immediately to Malebranche.²³

Foucher may have learned from Leibniz the title of Descartes's unfinished dialogue, La Recherche de la Verité par la lumière naturel qui toute pure, & sans emprunter le secours de la Religion ni de la Philosophie, determine les opinions que doit avoir un honeste homme, touchant toutes les choses qui peuvent occuper sa pensée.²⁴ It is through doubt that the purity of the natural light (reason) is recovered—apart from religion—from traditional philosophy (that is, scholasticism). One of the main complaints

²¹ "We are more free and untrammeled in that we possess our power of judgment uncurtailed" (Ac II.8).

²² Gassendi, Exercitationes paradoxicae adversus Aristoteleos, tr. Bernard Rochot (Paris: Vrin, 1959), book I, dissertations 1-4.

²³ «Because I philosophize in the manner of the ancient Academy of which the laws are too severe to permit one to undertake to divert a reader by deciding upon a number of topics that are the objects of his curiosity and enthusiasm, I refrained as much as possible from making the mistake of all prevailing logics according to which one takes the liberty of supposing a number of things as the conclusions of sciences he believes he already possesses» (*Critique*, p. 14).

²⁴ Leibniz already possessed a copy of Descartes's manuscript when he met Foucher in Paris and began corresponding with him (Leibniz met Foucher sometime between 1672 and 1674, that is, before Foucher published his Critique). The short Latin title of the Dialogue—"Veritatis inquisitio lumine naturali"—was mentioned in Pierre Borel's Compendium Vitae Renati Cartesii, published in 1656 (cf. Adam and Tannery, AT, X, 491). Leibniz also possessed a manuscript copy of the Regulae, whose full title, also mentioned by Borel, is Codices nouem de regulis utilibus & claris ad ingeii directionem in veritatis inquisitione (Borel, Vita Renati Cartesii, Paris: Ionnem Billaine, 1656, p. 18). Noting that Clerselier communicated a number of Descartes's manuscrits to the "sçavants," Adam and Tannery say that "peut-être Clerselier en a-t-il encore donné communication à Malebranche, dont la première publication, en 1674–1675, a précisément le même titre: Recherche de la Verité" (AT, X, 352).

of Foucher's against Malebranche is that he deals with theological and religious issues in a philosophical book (and in a book that according to its title aims to teach precisely how to philosophize), attempting to explain original sin and appealing to God to solve philosophical problems, notably to "vision in God" to solve the problem of representation posed by Cartesian dualism. ²⁵ As Gouhier suggests, at least as far as the relation of philosophy to theology is concerned, Foucher is closer to Descartes than is Malebranche. ²⁶ In attacking Malebranche's *Recherche*, Foucher defends Descartes's (and his own) *Recherche* "without the help of religion." ²⁷

As Richard Watson has remarked, what Foucher most valued in Descartes was doubt. Foucher's doubt is much more Cartesian than (ancient) Academic. For Foucher doubt is a method to eliminate prejudices and to prepare the mind for the truth. He attributes this position to the Academics—"it is only provisionally that they pursue doubt, and it is solely to be better disposed to receive knowledge of the truth" (*Apologie*, p. 154)—basing this interpretation on the legend diffused by Sextus and Augustine—denied by most contemporary scholars—that the Academics' were secret Platonists who doubted the sensualist and materialist philosophy of the Stoics and Epicureans in order to preserve the Platonic truths.²⁸ Foucher actually reads back into the ancient Academics his typically modern, specifically Cartesian, methodic doubt. Unlike ancient doubt, Foucher's doubt is an instrument to lead to something other than doubt itself.²⁹ In his effort to show

²⁵ "Half of his book is nothing but reflections on original sin, God's goodness, and depraved morals and bad inclinations that Christian morality should correct. I do not blame his piety in this, and I do not believe that it is unworthy of a Christian to work on these subjects, but it ought to be reserved for sermons" (*Critique*, p. 26).

²⁶ H. Gouhier, 'La première polémique de Malebranche', Revue d'histoire de la philosophie 1 (1927), p. 32.

²⁷ Foucher's remarks to Leibniz (8 December 1684) concerning the dispute between Malebranche and Arnauld is worth mentioning in this regard: «J'aurois bien des choses à dire et à ecrire sur cette dispute pour ce qui concerne seulement la Philosophie, car je laisse la Theologie à M. Arnauld» (*op. cit.*, p. 378).

²⁸ Cf. Sextus PH I.234 and Augustine, *Contra Academicos*, III.38. Although this view does not appear in Cicero, we see the anti-skeptic Lucullus asking "what are these holy secrets of yours, or why does your school conceal its doctrine like something disgraceful?" 'In order', replies the Academic, 'that our hearers may be guided by reason rather than by authority" (Ac II.60). The Academic reply seems to imply that they did hold positive philosophical views.

²⁹ See Paganini, Scepsi moderna. Interpretazione dello scetticismo da Charron a Hume (Cosenza: Busento, 1991), pp. 88ff. Paganini shows, following Popkin's seminal article 'Charron and Descartes: the fruits of systematic doubt', The Journal of Philosophy 51 (1954), pp. 831–837, that Charron is the first to introduce this voluntary doubt

that the Academics provide the philosophy most adequate for his time. Foucher says that, among other important things which will be indicated shortly, Academic doubt establishes human freedom: "because that we can suspend our judgment and not commit ourselves concerning doubtful questions." (Apologie, p. 141). Such voluntarism is characteristic of Cartesian, not of ancient, doubt. In this same Cartesian vein, Foucher says that a strict commitment to the rules of doubt requires strength of the will. If one ever has "courage and patience to follow these rules with exactitude", says Foucher, "one can hope for success greater than one can imagine, so much the more so that the truth discovered in recent centuries will add new sources of light to the ancient meditations" (Critique, p. 15).30 This truth discovered in recent times is the view that the so-called secondary qualities are in the mind. The progress one can achieve with respect to this truth by following more thoroughly the Academic rules than Descartes did is the discovery that the so called primary qualities are also in the mind. All this, concludes Foucher, sheds new light on the "ancient meditations" that exposed sensory error, corroborating skepticism about the material world and opening the way for the discovery of intellectual truths.31

If Descartes was the great rénovateur of the Academic tradition, reintroducing the rules of doubt, and liberating the mind which had

in the skeptical tradition. I have shown in 'Charron's épochè and Descartes's cogito: the skeptical base of Descartes's refutation of skepticism,' forthcoming in G. Paganini (ed.) The Return of Skepticism from Descartes to the Age of Bayle, that Descartes's methodic doubt is directly taken from Charron's Sagesse.

³⁰ The parallel with Descartes is remarkable. Descartes says that his four rules in the *Discours* will suffice, "provided that I made a strong and unswerving resolution never to fail to observe them" (CSM, I, 120; AT, VI, 18) and that their application in metaphysics and other fields would lead to great progress.

This is precisely the view of the "Abbé" in the remark B of the article 'Pyrrho' in Bayle's Dictionnary. "Je renonce aux avantages que la nouvelle philosophie vient de procurer aux pyrrhoniens. A peine conaissait-on dans nos écoles le nom de Sextus Empiricus; les moyens de l'époque qu'il a proposés si subtilement n'y étaient pas moins inconnus que la terre australe, lorsque Gassendi en a donné un abregé qui nous a ouvert les yeaux. Le cartésianisme a mis la dernière main à l'oeuvre; et personne, parmi les bons philosophes, ne doute plus que les sceptiques n'aient raison de soutenir que les qualités des corps, qui frappent nos sens, ne sont que des apparences. . . . Aujourd'hui la nouvelle philosophie tient un langage plus positif: la chaleur, l'odeur, les couleurs, etc. ne sont point dans les objets de nos sens; ce sont des modifications de mon âme . . . On aurait bien voulu en excepter l'étendue et le mouvement; mais on n'a pu.» At this point Bayle cites Foucher's argument and comments that Malebranche did not reply: «Il en sentit bien la force» (Dictionnaire, Genève: Slatkine Reprints, 1969, Vol. 12, p. 102).

thus far been "hidden in obscurity and the dust of the schools" (Apologie, p. 110), he did not follow strictly the third Socratic rule to avow one's own ignorance, "assuming the very thing that is most contested, namely, that everything clearly contained in our ideas is contained in the things that these ideas represent." (Apologie, p. 111). Here Descartes "goes further than the Academics, but in doing so falls into prejudice." (Apologie, p. 114). Not surprisingly considering that the objection comes from a skeptic, Foucher says that by proposing a criterion of truth Descartes commits the sin his way of philosophizing was meant to avoid: precipitate conclusions and preconceptions. Descartes's doctrinaire philosophy construed by the application of his criterion of truth thus conflicts, according to Foucher, with the most important aspect of Cartesian philosophy, namely, the recovery of intellectual integrity.

In the later Histoire et les Principes de la Philosophie des Academiciens Foucher deals again with the question of Descartes's relation to the Academics. In this later work which, unlike the Apologie, was not written under the heat of the polemics with the Cartesians (Malebranche and Desgabets), Foucher is more favorable towards Descartes. True, he indicates four differences between Descartes and the Academics: the latter do not hold that extension is the essence of matter (they make no commitments about essences); they acknowledge reciprocal causation between mind and body (a difference more from Malebranche than from Descartes); they accept that we have an idea of the infinite but only in "potentiality"; and they have another (Platonic) proof of the existence of God (Histoire, p. 188). (I return to the latter bellow). Notwithstanding these doctrinal differences, the decisive point is the manner of philosophizing. Foucher notes that Descartes hypothesizes in his physics, which is a procedure contrary to the Academic acceptance only of demonstrations, but this does not pose a problem, either, for, unlike Malebranche, Descartes does not take his physical hypotheses as true (*Histoire*, pp. 68–69).³² Finally, the fact that Descartes did not strictly follow the method of the Academics does not totally alienate him from this tradition since he

³² Foucher says that the same applies to Rohault's physics. This gives some plausibility to Baillet's claim that Rohault asked Foucher to give a funeral oration at Descartes's burial in Paris. Richard Watson expresses some doubt about this: "Because he did believe that Descartes was a great man, it seems likely that if he had been asked to give the oration or had prepared it he would have left a reference to it. Neither Clerselier nor Rohault mentions it" (*Breakdown*, p. 34).

presented the rules and intended to follow them.³³ Descartes failed because human nature is, after all, just too prone to yield in prejudice, because of the "bad habit, natural enough in men, of deciding easily, following opinions that favor their desires." (*Apologie*, p. 4).³⁴

If on the one hand Descartes failed to doubt enough (he did not doubt his idea of extension), on the other he doubted too much to the point of compromising the Academic (and, up to a certain point, his own) position. Foucher rejects Descartes's "hyperbolic" skeptical arguments: the deceiver and the evil genius. He says that these doubts ruin his system and that they may have been a concession to the theologians (Histoire, p. 200). Foucher's position is closer to that of Descartes's in the Regulae—a work that Foucher may have seen in manuscript form, see note 24—agreeing that the simple notions that are the object of pure intellectual intuition in which the senses take no part such as the cogito and geometrical and mathematical truths such as 2 + 2 = 4cannot be doubted and so are true (AT, X, 368-369; CSM, I, 44-46). These are the kind of "spiritual" truths not contaminated by the senses that Plato upheld and his Academic disciples indirectly defended by arguing against Hellenistic materialism. As is well known, Descartes introduces his hyperbolic doubt only in the Meditations.

Given Foucher's project of combating materialism and sensualism, one might wonder why he rejects a doubt whose main purpose is precisely to instill detachment from sense perception. The first reason is that for Foucher (as for the Academics according to Foucher) doubt is rational thinking *par excellence* so it cannot be directed against reason itself. Evident *a priori* rational truths such as 2 + 2 equals 4 and the principle of non-contradiction cannot be doubted. If God or some evil genius could make contradictions true, doubt would not be a liberating stance but one of chaos and confusion, which is how Pascal

³³ Foucher's position on this issue is contrary to Huet's *apud* Lennon ('Descartes, Huet and the Objection of the Objections', forthcoming in the proceedings of the conference "Skepticism as a force in Renaissance and Post-Renaissance philosophy"). Huet accuses Descartes of presenting his positive views, notably his criterion of clear and distinct ideas, aware that they do not pass the test of his own doubt, that is, that Descartes's positive resolution of his doubt was not meant seriously, that he never exhibited intellectual integrity.

³⁴ Bayle also holds this view. One could cite a famous passage of the same Abbé of remark B: "La grâce de Dieu dans les fidèles, la force de l'éducation dans les autres hommes, et si vous voulez même l'ignorance et le penchant naturel à décider, sont un bouclier impénétrable aux traits des pyrrhoniens, quoique cette secte s'imagine qu'elle est aujourd'hui plus redoutable qu'elle n'était anciennement" (op. cit., p. 101).

reads Montaigne's doubt.³⁵ If the eternal rational truths, in particular the principle of non-contradiction, were the mere result of God's will, human beings would lose their sole God-given instrument—reason—to fight superstition, prejudice and concupiscence of the senses.³⁶

Foucher's second reason for rejecting the deceiver is Descartes's claim in the Sixth Meditation that God would be a deceiver if the clear and distinct idea of body as extension did not exist outside the mind (the confused ideas of the senses, Descartes and Foucher agree, do not exist outside the mind as they are perceived). Ultimately based on God's benevolence, Descartes thus claims that there is an external material world corresponding exactly to our geometrical ideas. God would be a deceiver if he caused the idea of body (AT, VII, 79-80; CSM, II, 55). The resolution of Descartes's excessive doubt (God's benevolence) is therefore what allows him to step from the internal realm of ideas to that of the external material world. This step towards the material world is, according to Foucher, what most significantly indicates Descartes's departure from the Academic tradition which accepts only intellectual truths (in the sense that they are unrelated to the external material world). It is where Descartes "va plus loin que les Academiciens, mais c'est pour se precipiter en des prejugez."37

Foucher and all the other post Cartesian skeptics or mitigated skeptics of the seventeenth century rejected the strongest of Descartes's skeptical arguments. I have argued in my 'Charron and Descartes' that Descartes's hyperbolic doubt is precisely what allows him to transform Charron's view of épochè as the "essence" of the sage (in épochè the sage recovers intellectual integrity and thus reconciles himself with his true self which had previously been obscured by assent to external adventitious opinions) into the metaphysical doctrine that the thinking ego is essentially non-material, thereby refuting skepticism and founding a new philosophy. In this same paper I also note that Gassendi per-

³⁵ Bayle's Abbé departs from Foucher when he appears to doubt the principle of non-contradiction assuming the truth of some Christian mysteries. Foucher, for that matter, tends towards a rational Christianity.

³⁶ We thus find Foucher here agreeing with post-Cartesian mainstream philosophy, that is, in the company of Malebranche, Leibniz and Spinoza, defending a more coherent rationalism than Descartes's.

³⁷ Note that for Foucher the idea of extension is not purely intellectual—as Descartes and Malebranche claim—but sensory. All commerce with the external, material world is for Foucher necessarily mediated by the senses. See Richard H. Popkin, *op. cit.*; Richard A. Watson, 'Introduction' to the reprint of Foucher's *Critique* (New York, 1969), xxix–xxx; and Maia Neto, 'Academic Skepticism', p. 214.

ceived Descartes's move in these terms and attempted to reverse it by rejecting his hyperbolic doubt. In Foucher's case, the rejection of Descartes's hyperbolic doubt is related above all to Descartes's use of his (in Foucher's view "theological") resolution of this doubt to establish the existence of the material world and its adequacy to our clear and distinct ideas of body. Descartes's use of the resolution of his hyperbolic doubt thus conflicts with the Academic criticism of the Stoics that we have no apprehension (in the Stoic sense of a representation exactly similar to its exterior object) of the external material world. It also conflicts with the (controversial) Academic view that our cognitive powers should be turned inwardly, to spiritual realities (ultimately, toward God), and not to the external material world.³⁸

Foucher's Academic "skepticism" thus accepts logical and mathematical truths, immediate sense perceptions (he claims the Academics accepted all these and even the Pyrrhonians accepted the latter) and even the *cogito* (in the restricted sense of assurance of the existence of the self, not of its nature or essence).³⁹ It has already been indicated why he accepts the logical and mathematical truths. It remains to be explained why he accepted this restricted view of the *cogito*. The explanation lies in the way ancient skepticism was revived by

³⁸ Cf. Bayle's Abbé in remark B of 'Pyrrho': "Je n'ai donc nulle bonne preuve de l'existence des corps."—and Bayle adds a note that Malebranche acknowledeges in one of the 'Éclaircissements sur la Recherche de la Vérité' that it is very hard to provide such proof, this being one of the reasons Foucher tells Leibniz that Malebranche "paroist estre un peu Academicien" in the third volume of the Recherche (1678), cf. letters to Leibniz of 12 August 1678 and 26 April 1679 (op. cit., pp. 375–376)—Bayle continues: "La seule preuve qu'on m'en peut donner doit être tirée de ce que Dieu me tromperait, s'il imprimait dans mon âme les idées que j'ai du corps, sans qu'en effet il y eût des corps; mais cette preuve est fort faible. Depuis le commencement du monde, tous les hommes, à la reserve peut-être d'un sur deux cent millions, croient fermement que les corps sont colorés, et c'est une erreur. Je demande, Dieu trompe-t-il les hommes par rapport à ces couleurs? S'il les trompe à cet égard, rien n'empêche qu'il ne les trompe à l'égard de l'étendue» (op. cit., p. 102).

³⁹ Foucher cites Huet's objection that the *cogito* is circular but does not give an explicit approval of it (*Histoire*, p. 92). Foucher's philosophy has from the beginning been associated with Huet's. Without denying important similarities (testified by Foucher's himself at the end of the first book of his *Apologie*), where he says that Huet also chose the Academic way of philosophizing (p. 36), there are also important differences: 1– while Huet finds Foucher lacking the historical knowledge required for his project of revising the Platonic tradition (see letter to Nicaise cited by Watson, *Breakdown*, p. 34), Foucher finds Huet's militant anti-Cartesanism sectarian, disapproving, for instance, of the mockery of Huet's *Nouveaux Mémoires* (see letter to Leibniz of 30 May 1693 (*op. cit.*, p. 417); 2– Foucher is no fideist, he has a rational (based on Plato) proof of God's existence; 3– while Huet's philosophy tends toward Gassendi's partial materialism, Foucher's tends toward Berkeley's idealism.

Montaigne and disciples, and the central role of épochè in this revival. Cicero sees épochè as the safest position a philosopher can take, for, although it indicates that he has not vet achieved the truth (a hard thing to attain), at least it also indicates that the philosopher possesses no falsehoods either, so that he is closer to the truth than is the dogmatist (Ac II.66). Montaigne and his disciples develop this view in fact, shaping what we understand by "modern philosophy"—by founding in épochè the ethos of the philosopher, the standpoint where he finds his true identity as philosopher, recovering the integrity of reason by detaching it from all kinds of beliefs acquired through non-rational grounds such as tradition, authority, hear-say, the senses, etc. Montaigne and disciples targeted above all commonly held parochial beliefs and philosophical dogmas. These modern skeptics in a fashion similar to that of the ancient Pyrrhonians—expose the conflict of beliefs both in the field of ordinary life and in that of philosophy, indicating, in both cases, the impossibility of a rationally justified assent to either of two conflicting views. This characteristic skeptical mode of diaphonia—both the philosophical and the ordinary—appears in the first two parts of Descartes's Discours. Descartes says there that in ancient and scholastic philosophy there is "no point . . . which is not disputed and hence doubtful", which led him hold "as well-nigh false everything that was merely probable" (CSM, I, 115; AT, VI, 8). Descartes expected that with the universal use of methodic doubt, and the consequent establishment of his new philosophy, this diaphonia would come to an end. But in the second half of the seventeenth century, in Foucher's time, those who accepted the philosophy of Descartes (or important parts of it) no longer began with doubt, and those like Foucher and Huet, who did follow Descartes's method of doubt accepted virtually nothing of Cartesian doctrines. So Foucher observes the same philosophical conflict Descartes perceived earlier and takes the same position Descartes did, reaffirming épochè as the safest position "while the contrariness of the dogmatists lights upon minds and disturbes them with opinions; instead of which, if we imitate the Academics, we shall not rely on mere probabilities, and, with great caution, we shall await solid demonstrations to lead us to truth, lest we be blown and scattered by every wind of doctrine [ut nom fimus fluctuantes & circumseramut (sic) omni vento doctrinae]" (Apologie, preface).

This mental fluctuation from dogma to dogma comes not only from philosophical diaphonia but also—and mainly—from the very

variability of sense perception. 40 The main ancient source here is the flux doctrine in Plato's Theaetetus 152d-154. Because the external world and ourselves as sentient beings change continuously, sense perception can be true only momentarily. If we give our assent we'll find ourselves in error in the following instant. Foucher cites the Theaetetus to the effect that the senses "cannot be the mark of truth" (Apologie, p. 88). "It is well known that we must give up doubt in order to have knowledge, but few people think about how important it is not to give doubt up too soon, for we must stick with it as a harbor against prejudice and error, until evident truth forces us to give it up." (Histoire, p. 136). Descartes of course emphasizes—although this was also present in earlier skeptics—the fallibility of the senses and man's attachment to them. Foucher is strongly impressed by this predicament and more pessimistic than Descartes about man's capacity to strictly follow the rules of doubt (even Descartes did not follow them!). Considering the phenomenal, perceptual, material world as a world of error and deception, he, like the earlier modern skeptics, points to épochè as the stand where—given that truth is hardly a possibility in this veil of tears—at least we remain clean of corruption. To leave the "harbor" of épochè to reach anything external to the world of ideas—as Descartes did by assuming that his idea of extension corresponded to the external material world—is to expose oneself to error and prejudice.

One must turn inward and not outward, so Foucher approves of not only Descartes's first step, the method of doubt, but also his second, the *cogito*, whose acquisition by the Academic tradition he attributes to Socrates.

He realized that he thinks, and Socrates realized it as well when he said that he knew one thing, namely, that he knew nothing. He realized that he was thinking, and that he knew that he was thinking while doubting everything. Descartes tells us that he exists because he thinks, and he think because he doubts, since he cannot doubt without thinking and cannot think without existing. He adds that he can doubt every other thing, except that he is a being who thinks. He thus could have spoken as did Socrates and said right off, I know one thing, namely that I know nothing [unum scio quod nihil adhuc scio]. (Apologie, pp. 111–112).

⁴⁰ This mental unrest is what prompts the Pyrrhonian to his investigation that ends in épochè and ataraxia (PH I. 8 and 12).

Descartes indeed talked like Socrates, in beginning Meditation II: "I will proceed in this way until I recognize something certain, or, if nothing else, until I at least recognize for certain that there is no certainty" (CSM, II, 16; AT, VII, 24), and even of Socrates in the *Regulae*: "If... Socrates says that he doubts everything, it necessarily follows that he understands at least that he is doubting, and hence that he knows that something can be true or false, etc.; for there is a necessary connection between these facts and the nature of doubt" (CSM, I, 46; AT, X, 421).⁴¹

Note first that Descartes's view of Socrates as doubting everything is also Foucher's (I return to this at the end). Second, this passage provides textual evidence that Descartes's cogito is at least partially built on—or is inspired by—the Academic (skeptic) tradition. I have found textual evidence that Descartes bases his own view of the cogito precisely on Charron's (avowedly Socratic) claim that épochè is not a mental state of uncertainty but, on the contrary, of reassurance of the self, of recovery of intellectual integrity.⁴² Since Foucher consistently with his rejection of Descartes's hyperbolic doubt does not accept that the essence of mind is thought, he returns to Charronian épochè through Descartes, reversing Descartes's "dogmatization" of Charron's skepticism.

What are the spiritual/intellectual truths the Academics accepted besides the *cogito*? Foucher says in the *Apologie* that he is going to reveal the secrets Arcesilaus kept only to members of the Academy because he is writing to Christians, "people who find no paradox in the truths of the unity of God or the immortatlity of the soul." (p. 123). These secret truths all derive from the "great principle of the Academics... that by the sense we know only the modes of our soul." (*Apologie*, p. 131). The first truth is straightforwardly Cartesian, that "our soul is known to us before anything else" (p. 125). Second, that although we know our soul only "confusedly", that is, have no knowledge of its essence, (p. 124), we do know its unity or indivisibility (for, as Leibniz says in his *Discours de Métaphysique*, only one thing knows) and, therefore, that it is incapable of being destroyed (p. 129). The third is the proof of the existence of God where he says he

⁴¹ Edouard Mehl ('La question du premier principe dans la *Recherche de la Verité*', *Nouvelles de la Republique des Lettres* I (1991), pp. 77–97) takes this passage as the earliest version of the *cogito*, the "Socratic version."

^{42 &#}x27;Charron and Descartes', forthcoming.

departs from Descartes, proving God from God's creatures. As Watson says, Foucher's metaphysics parallels Descartes's somewhat clumsily.⁴³ In contrast to his detailed elaboration of the arguments against Malebranchean and Cartesian ideas, he does not elaborate at all on these "truths," which give the impression of having been presented only to show that the Academic philosophy also contains the constructive arguments required for a philosophy to be accepted at the time.⁴⁴

Despite the poverty of Foucher's metaphysics, it does have historical interest. He says he bases his theistic proof on the following Platonic principle: "nothing we know by the senses can subsist without some prior thought or some intellect that gives it existence (p. 131). This principle shows how far Foucher is from materialism (against Desgabets's charge), that Gartesian dualism precludes any knowledge of the external world, the solution he envisages is, I think, not to consider the mind as extended but to consider the material world as having properties Descartes attributes to the soul. Foucher applauds Leibniz's view that matter is not pure extension and that it must have some kind of mental nature. Popkin and Watson have pointed out how Foucher's attack on the primary and secondary qualities distinction—conveyed above—was historically "Pyrrho" article of Bayle's Dictionnaire cited above—was historically

⁴⁴ "Je ne donne point cecy comme une chose qui doive estre claire & evidente à tout le monde, mais seulement je montre de loin ces veritez, afin que l'on sçache que les Academiciens tendent à les establir" (Apologie, p. 28).

¹⁶ Watson claims that there is "a certain tendency toward materialism" in Foucher's *Critique* ("Introduction" to Watson's translation of Foucher's *Critique*, p. 6). The passages that seem materialist in the *Critique* are *ad hominen* arguments.

⁴³ "Foucher goes on to derive more truths from his principles than anyone might think possible. They parallel those of the Cartesian system, and while there is an element of grotesque virtuosity in the performance, it is undoubtedly serious. If from nothing else, this is evident from the fact that a careful examination shows that all these truths are about existence, but not about essences." Watson, *Breakdown*, p. 43.

⁴⁵ Dom Robert Desgabets replied to Foucher's Critique of Malebranche's Search in a Critique de la Critique. Foucher replied to Desgabets in a Nouvelle Dissertation sur la Recherche de la Verité, contenant la reponse à La Critique de la Critique de la Recherche de la Verité. Où l'on découvre les Errerus des Dogmatistes, tant Anciens que Nouveaux. Avec une discussion particuliere du grand Principe des Cartesiens (Paris: J. B. de la Caille, 1679). His reply to the accusation of materialism is on p. 55.

⁴⁷ "Pour ce qui est de l'essence de la matiere, il y a longtems que je me suis declaré sur ce point dans ma Critique et ailleurs où je pretends que l'on se trompe de pretendre que toute étendue soit materielle. Je suis bien aise de voir que vous vous accordez avec moy en ce point" (Foucher to Leibniz, 30 May 1691, op. cit., pp. 398–99).

important to Berkeley's idealism. I think Foucher might have welcomed Berkeley's idealism had he considered Berkeley's doctrine consistent with the Academic laws of inquiry. He does not claim, however, that there is no matter, probably because of his belonging to the Academic classical tradition that emphasized the obscurity of things,⁴⁸ and perhaps also because such a claim would have required the genius of someone of Berkeley's caliber.⁴⁹

Foucher's view of the priority of thought is also central in another constructive part of his philosophy which, though not presented in the context of his Academic dissertations, is also strongly influenced by Descartes: morals. Foucher wrote two moral works. The first, published in 1682, is *De la Sagesse des Anciens où l'on fait voir que les principales maximes de leurs Morales ne sont pas contraires au Christianisme*. The second, published semi-anonymously (with only the initials of the author) in 1688 is about Confucius' morals.⁵⁰ Both works consist of Foucher's commentary on maxims, those of the first attributed to pagan moral philosophers (Plato, Seneca and other Stoics, Epicurus and, most importantly, the ancient skeptics), and those of the second attributed to Confucius. In fact, the Western and Eastern sets of maxims are entirely consistent and express Foucher's own Academic morals, on which all philosophers who succeeded in detaching themselves from the senses and local moral and religious beliefs would agree.

La Sagesse des Anciens was initially planned to have four parts. In the first "it will be shown that men are made unhappy by their prejudices;" in the second "that the benefits of good luck cannot make us happy;" in the third, "an idea will be given of wisdom in its perfection; and in the fourth, "we shall examine what can be done with respect to the present life and the life to come" (Preface). As Foucher tells Leibniz, only the first two parts were printed, "the rest is not

¹⁸ Cicero repports that «Arcesilaus set on foot his battle... because of the obscurity of the facts that had led Socrates to a confession of ignorance, as also previously his predecessors Democritus, Anaxagoras, Empedocles, and almost all the old philosophers... [who held that] the senses are limited, the mind feeble, the span of life short, and that truth (in Democritus's phrase) is sunk in an abyss... all things successively are wrapped in darkness» (Ac I.44).

⁴⁹ I thank Thomas Lennon for indicating this second possible explanation.

⁵⁰ La Morale de Confucius, philosophe de la Chine (Amsterdam: Pierre Savouret, 1688) and in the same volume Lettre sur la morale de Confucius, philosophe de la Chine (Paris: Daniel Horthemes, 1688). Only the latter is attributed to Foucher by scholars. Foucher's initials do not appear in the other work and the supposed editor says the two works on Confucius have different authors. But the similarity of the titles, and above all the content of La Morale de Confucius, leave no doubt that the former is also Foucher's.

finished yet."⁵¹ The probable content of the fourth planned part appears in the volume on Confucius, it being tempting to speculate that Foucher did not include it in *De la Sagesse* for fear of it not according very well with Christianity.

The following statement from the *Apologie* summarizes Foucher's Cartesian-inspired morals: "Descartes rightly says that nothing belongs to us to the same extent as do out thoughts; in this our well-being consists" (*Apologie*, p. 85).⁵²

Foucher's morals is consistent with his updated (above all by Descartes) Academic skepticism. Chapter 14 of the first part of La Sagesse des Anciens reads: "That our senses deceive us with the false goods they present to us." Foucher comments: "the beauty of colors, the glitter of light, the most pleasant tastes, and the most harmonious sounds are not in the things we relate them to, and all that we know of them through our senses is nothing more than what we ourselves make it to be" (Sagesse, p. 65). After stating his Academic view "that there is not necessarily any resemblance in the things outside us that causes all these appearances in us, he points out the moral implication: "Thus the beauty that seems most worthy of our love is only a pack of lies, a complex of false knowledge, that we would not locate outside ourselves if we saw things as they are in themselves" (Sagesse, p. 66). The ancient wise men cited are first Plato ("he will tell you that sensible objects are only appearances that have no reality")," Democritus, Academics, and the Pyrrhonians, and even the modern philosophers." All of them "agree that sensible objects are not true goods, and that they are but the changing consequences of our soul's disposition" (Sagesse, p. 67).

The point of morals is therefore to detach the soul or mind from sensible objects thereby recovering its intellectual integrity. This characteristic Academic commitment is, according to Foucher, the key to Confucius' morals.

The chief secret, says Confucius, in acquiring true knowledge... is to cultivate and perfect reason, which is our gift from heaven. Concupiscence has disordered it and it has been corrupted. Purify it, therefore, so that it might regain its sheen and achieve its full perfection. Therein lies its highest good. (*Morale*, p. 23).

⁵¹ Letter of 8 December 1684, op. cit., p. 378.

⁵² This is the passage in Descartes's *Discourse* (CSM, I, 124; AT, VI, 26) that, according to Mersenne (AT, I, 366–7), raised the first charge of Pelagianism against Descartes. I have shown in my 'Descartes and Charron' that the passage most likely comes from Charron's *Sagessse*.

Through Confucius, Foucher presents his skeptic Cartesian view of concupiscence as the result of early assent and attachment to opinions about material and sensory things. Foucher thus attributes to what the ancient skeptics called 'dogmatism' the origin of concupiscence (to the extent that attachment to beliefs generate affective, emotional and passional disorder). It is worth remarking here the contrast with Malebranche. Foucher complains about Malebranche's including long discussions about original sin in a philosophical work. Foucher's view of concupiscence owes very little to Christian revelation. Foucher's choice of Confucius to present his moral views indicates their independence from Christian religion. Because concupiscence does not have a supernatural origin, no supernatural force (grace) is needed to contravene its negative results. Just as skeptical épochè was presented by the ancient skeptics as the therapy to the mental disease of dogmatism, so Foucher presents his own Academic épochè—construed according to Cartesian (but also Charronian) active doubt as the way to reverse concupiscence and to restore reason, and consequently behavior, to its primitive integrity.

When you have thus dedicated yourself to this goal, [Confucius] adds, give yourself over to *meditation*; reason within yourself about all things; try to have *clear ideas*; attend *distinctly* to what is presented to you; make well-founded judgments about them, without prejudice; examine everything carefully.⁵³ After reasoning and examining in this fashion, you will easily arrive at the goal, where you must stop, . . . namely, at a perfect conformity between your actions and what reasons proposes. (emphasis added) (*Morale*, p. 24)

Confucius's morals is not only described in Cartesian language but actually corresponds to the morals that Descartes presented to Elizabeth (letter of 4 August 1645), the second maxim of which is, "une ferme & constante resolution d'excuter tout ce que la raison luy conseillera" (AT, IV, 265).⁵⁴ Confucius, being a kind of nonchristian Cartesian, could carry Descartes's morals to a point Descartes did not dare out of fear of the theologians.

⁵³ The main "disposition" of Charron's wisdom is intellectual freedom which basically consists in "considerer, juger, examiner toutes choses, et ne s'obliger ny attacher à aucune" (Pierre Charron, *De la Sagesse*, Book II, chapter II, Paris: Fayard, 1986, p. 385).

⁵⁴ Descartes's maxim also appears in Charron, cf. my 'Charron and Descartes'.

The first maxim of book II of the letter reads: "All sin comes from the fact that we do not examine what should be examined" (p. 7). If the Cartesian/Academic first rule of inquiry of accepting only evidence be attentively applied in ordinary life, sin can be completely avoided:

Although we seem to clearly conceive certain things, yet because it is easy to sin through precipitation into one extreme or the other, it is then necessary to meditate in particular on the things we think we know, and to weigh each thing according to reason, with all the attention of which the mind is capable, and the utmost precision. We must try not to conceive things in a confused way, and we must try to have clear ideas of them such that the good can be distinguished from the bad, and the true from the false. (*Lettre*, pp. 63–65).

Foucher uses almost the same language of Descartes's Fourth Meditation. To avoid error and sin one needs only to make the effort to direct the attention of the mind strictly to what is clear and evident.⁵⁵ In his objections to this Meditation, Arnauld asked Descartes to edit the references to sin and good from a Meditation whose point was to avoid error in the sciences in a work that dealt only with philosophy (CSM, II, 151; AT, VII, 215). We know that for the Jansenist Arnauld there can be no genuine morals apart from Christianity and that one needs grace to avoid sin.⁵⁶ Foucher, who tells Leibniz he "would have a lot to say and write about the dispute [between Arnauld and Malebranche] solely concerning philosophy, for I leave theologie to Arnauld,"⁵⁷ develops the Academic, that is, philosophical, legacy of Descartes also in the field of morals.⁵⁸ Through Confucius, Foucher says that strict intellectual integrity in moral life is the recovery of

⁵⁵ "So what then is the source of my mistakes? It must be simply this: the scope of the will is wider than that of the intellect; but instead of restricting it within the same limits, I extend its use to matters which I do not understand. Since the will is indifferent in such cases, it easily turns aside from what is true and good, and this is the source of my error and sin" (CSM, II, 40–41; AI, VII, 58). "If . . . I simply refrain from making a judgment in cases where I do not perceive the truth with sufficient clarity and distinctness, then it is clear that I am behaving correctly and avoiding error" (CSM, I, 41; AT, VII, 59).

⁵⁶ When Arnauld saw Descartes's letters published by Clerselier, he said Descartes was Pelagian (letter to Vaucel, 18 October 1669 in Arnauld, *Oeuvres*. Paris: Sigismond D'Arnay, 1777, vol. I, p. 671).

⁵⁷ Foucher to Leibniz, 8 December 1684, op. cit., p. 378.

⁵⁸ Foucher might have said—and here probably correctly—that Descartes's timidity was also a concession to the theologians (as was his deceiver argument according to Foucher). Descartes in fact agrees with Arnauld's objection (CSM, II, 172; AT, VII, 248).

one's "initial integrity", "initial perfection", "innocence" (*Morale*, pp. 62–63).⁵⁹

By way of conclusion we can ask how Foucher got the view of a skeptic Plato. The view of a skeptic Socrates was—and still is—much more common. I quoted above Descartes attributing to Socrates in the Regulae the view that everything must be doubted. But with Plato it is a quite different story. As Leibniz says (see note 6 above), Ficino's Plato (the authoritative Plato) has little of the skeptic. Furthermore, the most important name associated with Plato in the context of the new philosophy of the time is Henry More. The Plato of this former admirer and later critic of Descartes is as distant from the skeptic as Ficino's. The hypothesis that Foucher got his skeptic Plato from Cicero is of course plausible. Cicero is the main source of information about the whole ancient Academy, and both the Apologie and the Histoire make it plain that Cicero's Academica is the main source used by Foucher in his project of reviving and rehabilitating the Academy. However, considering the Cartesian inspiration of Foucher's Academic skepticism and what we know about his life (his going while still young to Paris just after finishing his studies in the Jesuit college of Dijon to study with Rohault, and Huet's testimony about his lack of historical knowledge, which is Huet's habitual charge against the Cartesians) we can propose a more plausible hypothesis of how Foucher conceived his skeptic Plato and his project of the Academic revival.

This hypothesis is that Foucher's first source is Descartes's works. There are two texts. The first, far less significant than the second, is Hobbes's objection to the First Meditation. Denouncing the lack of originality of the First Meditation, Hobbes says that the uncertainty of sensible things was already exposed by "Plato and the other ancient philosophers" (AT VII, 171; CSM, I, 121). So we have in this Cartesian text the attribution of precisely the kind of skepticism Foucher attributes to Plato attributed by Hobbes specifically to Plato and other ancient philosophers, probably a reference to Plato's skeptical disciples, the Academics.

The second, more important text is Descartes's prefatory Letter to the French edition of the *Principia*. A number of points made by Descartes in this preface are of direct relevance for Foucher's Academic

⁵⁹ Once again we see Foucher assuming a position very similar to Charron, an author he never cites. Charron appears, however, more interested in morals than Foucher.

Cartesianism. It contains: 1- a definition of "Logic" as that which teaches the right way to reason in the search after truths (remember that Foucher's first "Dissertation sur la recherche de la verité" was the "Logique des Academiciens"); 2- a clear statement of the method of doubt which eliminates everything neither evident nor demonstrated (which is Foucher's first Academic rule); 3- the primacy of the cogito (which Foucher says was first established by Socrates); 4that to reason correctly—detached from material things—is to fully exercise human nature in its perfection (Foucher says that the Academic way of philosophizing is the proper way of using reason, it being called "Academic" just because the Academics exhibited it more thoroughly than all other philosophers);60 and 5- Descartes's view that if his method were fully and strictly followed it would lead to the end of diaphonia. Descartes says that his principles "will eliminate all ground for dispute, and so will dispose people's minds to gentleness and harmony" (CSM, I, 188; AT, IX-2, 18). Foucher says that it is the Academic philosophy that "ne travaille qu'à éloigner les disputes, afin de reunir les esprits, & les obliger de concourir à la production d'une Philosophie, également incontestable dans des principes & dans ses conclusions."61

The most relevant passage in Descartes's Preface for Foucher's project of rehabilitating Academic skepticism is, however, the one in which Descartes summarizes the history of philosophy up to him, and in particular his view of Plato. Descartes says that previous philosophy consisted basically of two schools. One of Plato and his disciples, and the other of Aristotle and his disciples. The dividing issue between the two schools was doubt. Plato, he says, "following the footsteps of his master Socrates, ingenuously confessed that he had never yet been able to discover anything certain. He was content

⁶⁰ Descartes says that not to philosophize, i.e., not to use one's reason properly, is worse than to keep one's eyes closed, and that the satisfaction derived from contemplating philosophical truths is much greater than that provided by worldly goods (CSM, I, 180; AT, IX-2, 3-4).

⁶¹ Réponse pour la critique à la preface de la Recherche de la Verité, où l'on examine le sentiment de M. Descartes touchant les idées (Paris: Robert J. B. de la Caille, 1679), avertissement. Foucher would claim that the Academics can more easily achieve this consensus because they withdraw their assent from any knowledge claim about the obscure external world. Once more Foucher returns to Charron's position, undoing the reversal Descartes performs on Charron's épochè. According to Charron, the sage gets rid of diaphonia by an active doubt that rejects all prejudices. Descartes thought that since his principles would be established after universal doubt, they would be naturally accepted by all who did doubt.

instead to write what seemed to him to be probable" (CSM, I, 181; AT, IX-2, 5-6). Descartes's Plato is thus an Academic skeptic of the Carnedean type. As to Aristotle, continues Descartes, "although he had been Plato's disciple for twenty years, and possessed no principles apart from those of Plato, he completely changed the method of stating them and put them forward as true and certain" (CSM, I, 181; AT, IX-2, 6). Putting it in Foucher's terms, Aristotle broke with the (skeptical) Academy (the right way to philosophize) by assenting to what is not evident, that is, he did not avoid precipitate conclusions. Their disciples, continues Descartes, rather than engaging themselves in the search after the truth, took their masters' positions to "extravagant errors" (CSM, I, 182; AT, IX-2, 6).62 The disciples of Plato doubted everything, "even the actions of life, so that they neglected to employ common prudence in their behaviour" (CSM, I, 182; AT, IX-2, 6).63 Those of Aristotle (the Peripatetics) recognized that some things were certain but mistook those things for sense perception: "certainty does not lie in the senses but solely in the understanding, when it possesses evident perceptions" (CSM, I, 182; AT, IX-2, 7).

Foucher could say of Descartes what the Academics said of Plato: amicus Cartesius, sed magis amica veritas. He builds on Descartes's skeptical reading of Plato and Plato's disciples, but corrects it. They did not doubt ordinary life and religion (not even the more radical Pyrrhonians did so), nor did they doubt what is certain and evident, i.e. the evident pure perceptions of the understanding. Their doubt was restricted to material sensible things.⁶⁴ Foucher could therefore

⁶² For Descartes, Foucher, and the Academic skeptics, the worst thing in philosophy is to submit to the authority of a previous philosopher, however brilliant he might have been. Foucher makes clear in his *Apologie* that the Academics do not follow any authority (unlike the dogmatists) but reason. He thus prefers to call the true disciples of Plato "Academics" instead of "Platonists" (pp. 28–29).

⁶³ The disciples of Plato according to Descartes are therefore the Academics and the skeptics are Pyrrhonians. While only the former claim to be followers of Plato, Descartes's description of Plato's disciples corresponds to Diogenes Laertius's description of Pyrrho (*Lives* IX.62). In his replies to Hobbes's objections to the *Meditations*, Descartes refers to "Academics and Sceptics" (CSM, II, 94; AT, VII, 130), differentiating Pyrrhonians from the Academics (a view important to Foucher's rehabilitation of Academic skepticism, given the usual association between Pyrrhonism and religious skepticism at the time). Foucher says that the Academics, unlike the Pyrrhonians, accept a number of truths, notably the existence of God and Providence, of the soul and its immortality (*Apologie*, pp. 123–41).

⁶⁴ "Descartes a parlé en quelques endroits des Academiciens suivant les sentimens vulgaires" (*Histoire*, p. 70). See, for instance, *Discourse*, part III (CSM, I, 125; AT, VI, 29).

say that, for the historical record, Descartes's view of the Academics is wrong and he is unconsciously himself an Academic, though only in intention. He failed mainly because he pretended that (what he perceived as) his clear and distinct idea of extension corresponded to what exists externally in the material world. Descartes fails against the Academic method (which was also his own) out of precipitation. thereby betraying his own project—which is the Academic project, according to Foucher—of philosophizing in order to detach his mind from the material world. Because Foucher considers the idea of extension as sense-based just like those of color and taste, he saw Descartes failing in a way similar to the way in which, according to Descartes in the Preface, Aristotle and his scholastic disciples failed by departing from the Academic tradition. So Foucher took as his mission to revive, and to update Academic prudence and vigilance against precipitation, thus reestablishing épochè and to complete Descartes's contribution to the Academic project, extending doubt to the so-called "primary qualities" and thereby fully realizing its liberating potential.

SIMON FOUCHER, KNOWLEDGE, AND IDEALISM: PHILO OF LARISSA, ANTIOCHUS, AND THE ENIGMAS OF A FRENCH "SKEPTIC"¹

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Simon Foucher is remembered mostly as the dogged—and I think misguided—critic of Nicolas Malebranche. Richard Watson assigns to him the place of honour in the downfall of Cartesian dualism.² But Foucher was also a philosopher in his own right, one who struggled to find some ground between the dogmatists he detested and the sorts of skeptics he feared would erode human dignity and decency. His own philosophy is often enigmatic. Not all the enigmas can be unravelled, but I shall argue that the attempt is worthwhile.

I will summarise his positions here and document them in subsequent sections. Foucher was always a skeptic about the possibility of reasoning one's way from the immediacies of sense to some reality behind the knowing mind and soul, and he never tired of pursuing those who thought, according to his reading of them, that they could perform this feat.

Yet he believed that we have knowledge of some sort, and he also believed like Philo of Larissa, that he could put together the bits of

¹ This paper continues a conversation with Richard Watson which began more than a decade ago and occupied several dinners in Parisian restaurants. It suffered a long interruption when much of Foucher's work at the Bibliothèque Nationale was sent to the binders. It is offered now as a small token of gratitude and affection.

² He calls him "a sceptic who originated epistemological criticisms that are fatal to the Cartesian way of Ideas". (Richard Watson, *The Breakdown of Cartesian Metaphysics*—hereafter *Breakdown*—, Atlantic Highlands, NJ, 1987, p. 33.) In the introduction to the facsimile reprint of *Critique de la recherche de la verité* (1675), New York: Johnson Reprint, 1969, p. vi, Watson says "It was the work of Foucher that undermined the foundations of Cartesian dualism." I doubt that Descartes ever intended to be a "Cartesian dualisi" if that means a believer in the simplistic doctrine that there are supposed to be two ultimate substances the interactions of which pose horrendous philosophical problems. (See Leslie Armour, "Descartes and Eustachius a Sancto Paulo: Unravelling the Mind-Body Problem", *British Journal of the History of Philosophy*, September, 1993, pp. 3–22). Foucher and Watson alike would want to take up that argument; it is out of place here.

the Platonic tradition and defend what he took to be the real Academic position. He thought that there is a pattern to our experiences, that we can discern at least some of it, and that this pattern is reality or at least a likely facet of it. The pattern is never complete, and it is never wholly divorced from what goes on in our minds. Yet it is knowledge.

Thus he may seem to be on all sides of the celebrated controversies. More than 130 years ago, Félix Rabbe struggled to make sense of Foucher's texts.³ He concluded 185 pages of analysis this way: "[Foucher] is much closer to Locke and to Destutt de Tracy than to Kant.... He takes his place between sensualism and idealism, sometimes one, sometimes the other... a sensualist against Malebranche, idealist against D[om] Robert [Desgabets]."⁴

I shall argue, though, that Foucher's complex views and many of his twists and turns⁵ make sense if one notices that he believes that reality is a systematic structure of ideas, and that reason bears on experience as an attempt to find such a systematic order. His view of knowledge is like the one embedded in Philo of Larissa's own claim—supported by Foucher—that the history of the Platonic academies itself makes sense.⁶

One must also notice that, though his view sounds like, and arguably is, a form of idealism, Foucher insisted that this view of reality is compatible with believing that mentalism, as that term might usually be understood, is false. His system includes the fact that we have valid ideas of brains as well as of minds, and that our best-reasoned systems of ideas are never complete though they are never worthless, either. He speaks of brains, but it is never quite clear exactly what it is to have a brain: so far as I can tell a brain according to Foucher is a certain form which can be a modification of the soul. It shows

³ Félix Rabbe, Étude philosophique: l'abbé Simon Foucher: chanoine de la Sainte Chapelle de Dijon, Paris: Didier, 1867.

⁴ Rabbe, Étude, p. 185.

⁵ The twists and turns include his orthography. I have tried to keep Foucher's spelling in titles and quotations. "Verité" without the accent on the first "e", the plural "veritez" and "ame" without the circumflex are common examples. Outside quotations I have adopted the usual spellings.

⁶ Foucher, Dissertation sur la recherche de la verité contenant l'apologie des académiciens, Paris: Estienne Michallet 1687, (Bibliothèque Nationale R-11337) pp. 30–31 lists the academicians and what they did. It is to Philo that Foucher ascribes the attempt to grasp the unity of the Academy. (I will refer to this work subsequently as Apologie. Foucher published a number of variations on this title.)

itself as a set of ideas in the mind through which the mind grasps some of the natural laws within which it must work. Certainly, for Foucher, what it is to have a valid idea of a brain is to be aware of a certain modification of one's own soul and of the relation between that idea and certain other ideas—i.e., to have a systematic explanation in which the concept of brain plays a justifiable part.

1. Foucher's Springboard

Foucher's springboard is almost certainly the central plank in the philosophy of Philo of Larissa. Philo attacked the "Stoic criterion" of knowledge—the claim that knowledge must be founded on particular sensory experiences and that no one knows anything without finding the necessary causes of such experiences. Philo urged that this strange combination of appeal to sensory experience and insistence on necessity is untenable and can be replaced by a notion of experience as systematic.

Although he mentions a few other sources for his knowledge of "the academics," Foucher's main source was Philo, whom he knew mostly through Philo's pupil, Cicero. Philo of Larissa is a shadowy figure still. We do not have his two "Roman books", the books that provoked Antiochus to anger when they arrived in Alexandria. But Philo's rejection of the "Stoic criterion of certainty" is not in doubt. Spelled out, the criterion was that nothing presented to the senses should count as knowledge of the external world unless it was impossible that it should be caused by anything other than the object it was supposed to represent. That is, if I seem to see a blue-jay, I can't say that I do see a blue-jay unless this particular image could only be caused by a blue-jay. Of course, nothing ever meets this standard. Lots of things can make me think I see a blue-jay. Physicists might sometimes seem even now to reason in this Stoic way and to infer from a pattern in a bubble-chamber to the existence of certain kinds of particles, but they would admit that they can be fooled and the reason that they accept such arguments is that they do not rely on a single experience or on any experience unless it is related to a tenable theory.

Antiochus was horrified⁷ when Philo threw out the Stoic criterion.

⁷ Cicero, Academicus, I, i, 11. Catullus and Antiochus at first could not believe

But Philo insisted that the Platonic tradition depends on a view of experience and knowledge in which the long pattern of experience and not any single experience is always central.⁸ Antiochus reportedly changed his philosophy as a result of this shock. A popular thesis has been that he went on to build an eclectic philosophy that was the seed from which Alexandrian metaphysics grew.⁹

The crux of the matter for Philo, though, was that we should not try to build our knowledge on single experiences, but on extended patterns of them. We must focus on the idea of knowledge as a system which is built according to reason and which is to be used to make sense of the world in which we live. In Foucher's view, as we shall see, such a system provides a fruitful soil in which divine inspiration can lodge in our minds.

In this way one might hope to find a way between the dogmatism which Foucher attributed to Descartes (however much he admired him) and the skepticism which lumped success along with failure and provided no place (in Foucher's view) for divine inspiration to take root. We can say that our ideas are reasonable, that they make sense of our lives and provide the background against which Christian revelation is to be understood. Yet we can also accept that we may be wrong about any particular.

Foucher not only accepts Philo of Larissa's reported claim to have put together the sundered fragments of the Platonic academies, but suggests that he had found a way of looking at experience that balances skepticism and belief. This way of looking at things enables Foucher to suppose that one could have an objective plan for knowledge gathering without having to confront in the obvious way the impossibility of moving from the inner life of our own experience to an external world. If I am right, this explains why he was so upset by the claims of Descartes and Malebranche and also why he seemed to agree about so many things with Leibniz while refusing to accept Leibniz's particular kind of idealism.

that the "Roman Books" were by Philo. Antiochus published his Sosus as an attack on Philo, his former teacher. (I have used the Loeb Classical Library edition of De Natura Deorum and Academica, ed. and tr. H. Rackham, Cambridge, MA: Harvard University Press, 1933.)

⁸ Harold Tarrant, Scepticism or Platonism: The Philosophy of the Fourth Academy, Cambridge: The University Press, 1985, and Jonathan Barnes "Antiochus of Ascalon" in Miriam Griffin and Jonathan Barnes, eds., Philosophy and Roman Society, Oxford: Clarendon, 1985, pp. 45–97.

⁹ This is now thought to be very doubtful. It is even possible that Antiochus spent only a short time in Alexandria. But we do not know.

2. Foucher's Significance

Foucher may well be important. Richard Watson has provided many reasons for thinking so. ¹⁰ Certainly, Foucher was one of those who wove the tangled web of the theories of knowledge and metaphysics in the late seventeenth century which accounts for much of the best and worst in our civilisation. My problem is not the downfall of Cartesianism, and so things I will look for will not be exactly Watson's, but I will be following in his footsteps much as he, in turn, followed in the footsteps of Félix Rabbe.

Foucher was the critic of Malebranche, the author of seemingly countless denials of the Oratorian's claim to have worked his way from the ideas that animate our minds to the external world that God had planned for our salvation. Yet Foucher's God was Malebranche's God, and he didn't really doubt that God had plans for us. He was a critic of Descartes' "dogmatism", but we must bear in mind that he wanted to carry out Descartes' project—to find a better foundation for the sciences without destroying religion. Foucher's taste sent him looking for arguments that would be very different in kind from those with which Descartes hoped to put a stop to the ever-annoying voice of Sextus Empiricus which preyed on his conscience. But Foucher also wanted to put Sextus in his place. We also remember Foucher, thanks again to Félix Rabbe and Richard Watson, as the correspondent of Leibniz and perhaps we should think of him as a man who produced an alternative to Leibniz's idealism.

3. Philo of Larissa

Foucher always insists that his roots are in the Academy and only Philo of Larissa's project seems to meet his whole-hearted approval. Philo lived from around 160 to 80 B.C.¹² Cicero mentions him exten-

 $^{^{10}}$ The Breakdown of Cartesian Metaphysics (passim, but especially 33–45, 53–77, 79–84, 131–147, 149–151, 206–209, 214–216, and 229–235).

¹¹ Because Foucher's passion centred precisely on the question of whether what is presented to our senses gives us knowledge of things in themselves, he too strongly associated Malebranche with Descartes and never did quite see the point of Malebranche's insistence that we see all things in God. Malebranche believed that what we grasp are the very ideas that God uses to constitute the world. But that is an issue that will emerge in the discussion which follows.

¹² See Carlo Lévy, Cicero Academicus, Rome: École Française de Rome, 1992.

sively both in the Academica¹³ and in De Natura Deorum.¹⁴ Still, Foucher's sources about the Academy in the period of Philo and Antiochus were shaky—Cicero is not always to be taken at face value¹⁵ and Philo's other sources—Sextus Empiricus, Diogenes Laertius, Plutarch and Augustine¹⁶—are imperfect, too. Sextus and Augustine, were, like Cicero, participants in the debate.

But there is no reason to doubt the part of the story that matters. Philo of Larissa did reject the "criterion" that made skepticism inevitable. For the rest, Philo seems to have lived in relative obscurity and to have come to fame only after he took over the Platonic academy. He concluded that, despite appearances, there was a continuous Academic tradition which might rightly be called Platonism. The various elements that we associate with the successive Platonic Academies all had their places in it.

Philo seems to be accepted widely as founder of the "Fourth Academy". Harold Tarrant says, not unreasonably, that the question of how to distinguish the successive academies must be determined by reference to the question of "apprehension". The Second Academy of Arcesilaus first introduced the theme of "non-apprehensibility". Carneades and Clitomachus are singled out as those who had what Tarrant calls a "positive" doctrine of non-apprehensibility. I suppose he means they held that things have some property which makes them non-apprehensible, 17 though such doctrines actually go back at least to Heraclitus. Whoever held the "positive doctrine" of non-apprehensibility would then constitute the Third Academy. Philo insists on mediated apprehensibility. We grasp things through systems of perceptions and reason plays a part. Thus Philo would be the founder of the Fourth Academy. There are those who think that at Alexandria Antiochus founded a Fifth Academy, though, if it existed, it would have been marked by the return of Antiochus to a rather rich eclecticism.

Whatever the truth about the history of the Academy, there was certainly a kind of dialectic in which reason and experience were

¹³ Philo is mentioned a number of times. Philosophical issues about the Stoic criterion are discussed, for instance, at 2.132 and 2.34. See also 1.13, 2.11, 17, 18, 31, 78.

¹⁴ 1.6, 11, 17, 59, 113.

¹⁵ See Barnes, op. cit., p. 60.

¹⁶ This is the list Foucher gives in Dissertations sur la Recherche de la vérité contenant l'histoire et les principes de la philosophie des academiciens, Paris: Jean Anisson, 1693, p. 10.

17 Tarrant, op. cit., p. 8.

balanced off as new ideas, and new objections emerged. The main tradition was always one of the exchange of reasons. Philosophers conducted themselves more like lawyers in court than like those Parisian philosophers of our time who announce profound truths which seem simply to emerge from the depths of the souls they suppose themselves not to have.

What Philo and Foucher alike appear to have objected to was the tendency to divorce reason and experience—to take sensory data as atomised particulars rather than as patterns in which a reasonable order might be discerned. True, they thought that the senses as such are not to be trusted. But reasonable constructions generate their own bases of trust.

Such a view has a curiously contemporary air. Our sciences are theory-dominant, and what has been called the "surrogationalist" theory of language has been called into disrepute. We no longer think words "stand for things" in a simple one-to-one way. What we can rely on, to one degree nor another, are extended patterns embodying substantial reasoning. The skepticism which emerges from this view is not so very different from that of Sir Karl Popper. We can always falsify our claims (though not always in a Popperian way). We can never finally substantiate them.

Philo seems to have thought that things in themselves are uncognisable except through reasonable constructions. The positive side of this story may well lead to what is called nowadays "objective idealism", a position still defended. There is a supportable notion that what we know consists of the properties of a system which is self-contained and which does not admit of questions about what is "beyond" it except in the sense of some other more inclusive system. Philo's position also suggests that experience is a dense system, almost in the mathematical sense. There is always something more to be discerned within it and all questions are about what is within it. Between any two points in the system there is something more. An account of experience which might go with a position something like this has recently been defended by Jean-Luc Marion, some of whose roots clearly go back to the seventeenth century. 19

 ¹⁸ E.g. by Vittorio Hösle, L'idéalisme objectif, tr. Stéphanie Costa, Bernard Goebel, and Jacob Schmutz, Paris: Cerf, 2001.
 ¹⁹ De surcroît: étude sur les phénomènes saturés, Paris: Presses Universitaires de France, 2001.

4. Foucher's Idealism

Such suggestions lead naturally to a discussion of Rabbe's remark about Foucher's "idealism". Some of Rabbe's comments strike home: Like Locke, Foucher thought that knowledge must begin in experience, but he would have cheerfully accepted Locke's "great argument" for the existence of God. Knowledge has to be a system, and the concept of God plays a part in it. I think this is what Foucher means when he says that Plato could prove the existence of God.²⁰

Against Malebranche, Foucher is most often the "sensualist", because he thinks Malebranche moved illicitly from ideas to their objects. But against Dom Robert Desgabets he appears to be an idealist, because Dom Robert wanted to infer the existence of material objects from ideas, and Foucher wanted always—or nearly always—to remain in the domain of ideas.²¹ But Foucher may seem more like Kant than Rabbe admits. One can read many passages and conclude that Foucher thinks there could be—indeed perhaps there is—an external world which we simply cannot know. What we know is that there are modifications of the "soul" which give rise in the mind to ideas of things like brains. Perhaps there is nothing more to be known about matter. One must remember that Foucher would have had in mind the scholastic notion of matter as a capacity to take on form, for we are here on a watershed of ideas and scholastic notions still mingle easily with their successors.

A good series of clues to Foucher's central notions is found in the 1675 Critique de La Recherche de la Verité, Lettre par un academicien,²² and another—along with many new complications—appears in the 1676 and 1679 editions of Réponse pour la critique à la preface du second volume de la Recherche de La verité.²³ One needs to keep a sharp eye on the texts. Quite early on in the 1675 Lettre, Foucher attacks Malebranche for a foolish kind of separation of mind from the rest of reality. But

²⁰ Apologie, p. 59.

²¹ Watson, *Breakdown*, pp. 79-84 summarises Desgabets in a way that makes clear just why Foucher would take this view.

This Lettre opens the Martin Coustelier edition, Paris, 1675 which is bound with Critique de la Recherche de la verité. (Bibliothèque Nationale R-11334).

²³ Paris, Charles Angot, 1676 (Bibliothèque Ste Geneviève R-335 INV 1851 FA) and Paris J. B. de la Caille, 1679 (Bibliothèque Nationale BN R-11335.) BN R-11335 has an avertissement not contained in the Ste Geneviève copy. The page numbers are the same. I will refer to this work as Réponse second volume.

not long afterwards he praises Plato for showing the superiority of the mind to the body. So let us follow him.

Foucher says that Malebranche supposes that the human mind has nothing material or extended about it. He concedes that the idea of matter is a very difficult one but, if one makes Malebranche's assumption, one puts the human mind in a very bad position somehow wholly separated from the brain it uses.²⁴ Foucher accuses Malebranche of saying that the human spirit is simple and indivisible, but then going on to talk about several faculties of the soul.²⁵ He warms to this problem and says it seems evident that man needs a brain.²⁶ Is pure intellection less involved with the brain than sensation? Experience shows that the brain is tired by intellection as much as by sensation. No pure intellection is found. Yet he says Plato has demonstrated the superiority of the mind to the body.²⁷

These statements can be made to square. For Foucher does think that we have ideas of the body and of the natural world, but he thinks that they are all modifications of the soul and that they are related to one another in such a way that we always find the other ideas in association with the idea of a mind in a way that associates them with a particular mind.

In the Réponse pour la critique à la preface du second volume, he doubts that we have knowledge of things outside us. But he says we need not look further than our own senses—for there is no better knowledge. We have a body attached to our souls. "Nous en avons un avec lesquel nostre ame est jointe". And he adds "il n'est pas d'une autre genre que les corps qui ne nous touchent pas". In short we know bodies in general as we know our own body—through ideas that are modifications of our own souls.

Somewhat later, he comes once more to the notion that our ideas are within us though they contain something that "belongs to objects". It is perhaps important to note that they belong to "objects" and not to bodies. And finally they are part of the soul, literally facets

²⁴ Lettre, 1675, pp. 21-24.

²⁵ Lettre, 1675, p. 24.

²⁶ Lettre, 1675, p. 37.

²⁷ Apologie, pp. 59-61.

²⁸ Réponse second volume, pp. 24-28.

²⁹ Réponse second volume, p. 26. Note that it is specifically the "soul" [ame] that he speaks of here not "esprit".

of the entity which functions as the knowing subject. "Elles doivent une partie de ce qu'elles sont à la substance de nostre ame, comme des façons d'estre à leur sujet".³⁰ We search our souls when we search for the truth.³¹

In fact "it is not necessary to know matter to judge what these things are in themselves". "Il ne soit necessaire de connoistre la matiere, pour juger ce que ces estres sont en eux-mesmes".³²

The point of all this is that we can put our ideas together and get reasonable pictures. As long as we have reason and good sense, the rest, as we shall see, follows. We really know that we have bodies, for what it is to know that we have bodies is to know that we have ideas of bodies and that these ideas figure in an intelligible system.

Despite all this, Foucher is aware that there seem to be distinctions in ideas, associated with different sorts of truth. But he thinks that these distinctions may easily lead us to the wrong conclusions. He discusses at length the claim that there are necessary truths and contingent truths. Some truths obviously seem to reflect only our own inner life, but others properly apply to objects in the world outside.

He says that the necessary truths, according to Malebranche, are those that are immutable by their nature because they are what they are by the will of God, and the will of God is not changeable.³³ If we could identify them they would be objective in the sense that they must be the same always and for everybody, and true everywhere. Hence in a sense they would refer beyond us.

Foucher is suspicious of much of this. He does accept mathematical truths and he grants that the will of God should not be thought to be changeable. But how do we know what truly reflects God's will? Certain truths hang on ideas of the laws of logic and nature. Descartes thought God could change even the laws of logic, but that he wouldn't on moral grounds.

But the mistake of Descartes and of Malebranche, as Foucher reads them, is to think that one kind of idea leads us *altogether* beyond the mind. In fact, what is proper is to reason about the relation between the ideas of mind and body alike as they appear *in our experience*. That is, the idea of a brain is necessary to our explanations

³⁰ Réponse second volume, pp. 49-50.

³¹ Réponse second volume, pp. 51-52.

³² Réponse second volume, p. 52.

³³ Lettre, 1675, pp. 25–32.

because we know, Foucher says, that the idea of pure intellection is a special kind of nonsense. If there were pure intellection we wouldn't get tired. In his examples we put all these things together in a system of ideas that together make sense.

Basically, Foucher's claim is that our ideas—whatever the logical status of the propositions which express them—are ontologically of one sort, and how we categorize them is a matter of what we want to do. He starts with sensation. He insists that even such abstract objects as words are directly connected to our brains and that everything can be connected in this way. Yet what we are talking about are ideas—ideas of bodies (brains) as well as ideas of words, numbers, and minds. "Car toutes nos sensations n'estant autre Chose que des Experiences de plusieurs Façons d'Estre dont nostre Ame est capable." "... all our sensations are nothing but experiences of several ways of being of which our souls are capable." He talks of light and colours, and says space and geometrical figures are also "in us". These figures "ne sont moins en nous" than light and colours.

The necessities beloved by those who see God in nature are no doubt there. But which propositions express these truths is something we must decide. In the end, we come down to judgements that we make about what is necessary for the principles of science. We can make good judgements, but the material which goes into them is always within us.

5. MIND, SOUL, & NEOPLATONISM

Foucher talks a good deal about the soul. We need to distinguish mind (esprit) and soul (âme) in reading him. The soul is basic because it is the background and ontological underpinning of every experience. We can think of ourselves without thinking of any particular thing because the self is always in the background. Certainly there is no pure thought—there must always be something else that we are thinking about. Equally, there is no single object which is necessary to self-awareness.

Like Hume after him, Foucher thinks there is no object in experience which \dot{w} the self, but for him this is not a problem. The self is a complex intelligible system.

³⁴ Lettre, 1675, p. 79.

Foucher would argue that all the knowledge we now have of, say, neurophysiology is the result of accumulating instances in the way Philo of Larissa recommended. It is useful. It is not certain.

Yet Foucher thinks Platonists can demonstrate the immortality of the soul, and he seems to mean by this that the idea of the soul is basic.35 Everything else including our ideas of matter consists of modifications of it. Matter seems to function as the source of continuity through which laws of nature are expressed. Foucher tells us, as I noted, that "matter" names a difficult idea, and I have not found a definitive account of it in his writing, but it is evidently, as I suggested, not so much hard stuff which forms an external world as it is a kind of Aristotelian capacity to bear forms. This is probably why Rabbe suggests that Foucher sometimes veers towards Aristotle.³⁶ No doubt, when we are in the next life there will still not be the pure thought that Foucher thinks Malebranche wrongly imagined. either. But the accompaniment may not be anything that we would associate with brains.

The nature of Foucher's "idealism"—if we are willing to accept the idea that he at least tended toward something that looks like idealism depends on our understanding the nature of the "soul" and its relation to mind and body. I think there is, as I have suggested, a very important distinction here. Foucher thinks Plato is right and can convince others about minds and bodies, and, he says, the right way to convince them "c'est de leur faire comprendre que le corps suppose l'esprit."37 He does not here speak of "l'âme". The same paragraph does contain other references to something apparently more basic than the mind. Here it is called "une pensée". He says that there can be "aucune étendue, aucune figure, ni aucune mouvement, s'il n'y une pensée antérieure à tout cela." This is somewhat confusing, but the sense is that there has to be an intelligible order within which the distinctions are made. Mind (esprit) and body (corps) are both ideas within the soul. The soul itself is basic and its modifications produce or are associated with these ideas. Is it "la pensée antérieure"?

We should look at the background. Foucher was not alone in being somewhat uncertain. The mind-soul distinction seems to have troubled Malebranche a little, too. Foucher constantly suggests that Malebranche

Apologie, p 59.
 Étude philosophique, p. 185.

³⁷ Apologie, p. 59.

is confused about ideas, their connection to our individual souls, and the world. For Foucher, soul in this sense is the basic structure of ordered thought within which the distinctions are made.

The distinction between soul and mind remains problematic, but it is worth noting that Malebranche did leave traces of a worry about whether or not he ought to regard the two as one and the same thing, though the outcome of his worry is uncertain. In his response to Regis he is very clear that "notre esprit est fini". 38 In Méditations chrétiennes he insists that the soul (l'âme) is so great that we have no idea of it and that if we could have such an idea it would obliterate everything. In other words, in one sense, the soul is infinite. It transcends everything else we could know to the extent of obliterating all of it. And in the same passage Malebranche tells us that we have a "vûë claire de l'esprit" and of its modifications. 39 So they must be different. Similarly in Recherche de la vérité Malebranche warns against trying to get an account of the soul from sensations, though there he holds out hope for the "inner sense" ("sentiment intérieur"). This surely suggests a distinction, too. In the earliest edition of Recherche de la vérité, right at the beginning (in I, I, 1) there are signs of it as well.⁴⁰ Malebranche had begun the discussion of the faculties of the mind by using the words "esprit ou âme", but he changed it to remove the word "âme".41 He did seem to think there is a clear idea of "l'esprit" and not of "l'âme". On the next page, he switches to talking about "l'âme" which has "inclinations" which are its "modifications". 42 Admittedly the tendency to separate mind and spirit is not perfectly consistent. In the 1675 preface to Vol. II of the Recherche—in the reply to Foucher—Malebranche says that "l'âme", not the "l'esprit" has two faculties, understanding and will.

Malebranche's account of the soul in *Méditations chrétiennes* has a distinctly Neoplatonic (or at least neo-Platonic) air about it, and Foucher's account is obviously associated with his references to Plotinus. In the end, for Malebranche, we "see all things in God", and

³⁸ Réponse du P. Malebranche à M. Regis, Paris: André Pralard, 1693, II-7; Oeuvres, Paris: J. Vrin, Vol. XVII-1, 1977, p. 283.

³⁹ Méditations Chrétiennes et métaphysiques, Cologne: Balthasar d'Egmond, 1683, IX-20, Oeuvres, Vol. X, 1986, p. 104. Recherche de la Vérité, I, XIII, iv; Oeuvres, Vol. I, p 147. ⁴⁰ Paris: André Pralard, 1674.

⁴¹ The wordings of the different editions are noted in *Oewres*, Paris: J. Vrin, Vol. I, 1962, 1991, p. 40.

⁴² Recherche I, I, i, Oeuvres, Vol. I, 1962, 1991, p. 41.

our souls are, after all, awaiting reunion with the divine. In the meantime what we grasp when we know something are the ideas with which God constitutes the world. "Esprit" perhaps is a notion belonging to our interim state.

Foucher's Neoplatonism is more difficult to estimate. Rabbe notices that Foucher uses the Platonic argument that the multiplicity of sensations itself implies a unity of the percipient, and that in pressing this argument he follows Plotinus above all. Foucher certainly insists that what we are able to sense and understand "ne peut subsister sans une pensée antérieure ou un Entendement qui donne l'estre à toutes ces choses". 43 Strictly speaking he goes no further than to insist that there is, indeed, a prior "pensée", a source of intelligibility. Notice that what we have been calling "l'âme" may, as I noticed earlier, have become the "pensée" referred to here. Since this "pensée" underlies "l'esprit" the idea of it seems to do the same logical work as the concept of the soul, and thus to sustain the notion of "l'âme" as the basis for all the activities of "l'esprit". Foucher is talking about God, so this suggests that he thinks that there is a greater soul in which we all take part. This is never fully spelled out, however. He urges that our "esprit" must come directly from God, our bodies from secondary causes which are nevertheless associated with the "Entendement divin". The insistence on "secondary causes" seems mysteriously to employ a kind of argument he usually rejects. But the claim that logic demands an underlying "pensée" depends on a very different, Platonic or Neoplatonic, argument.

Foucher hints at what may be another notion of idealism when he tells us, as I noted, that matter (the body included) is a difficult notion, 44 not fully coherent because it depends in some way, as Plato suggests, on mind. Logic may not grip it. If this is true then our ideas of matter may be inferior as *ideas*. But when Foucher talks about brains he seems to take bodies more seriously.

There may be more light cast on his ontology in his correspondence with Leibniz. Foucher always tended to think that we need not solve the problem of knowledge of an external world, though we can find suggestions that there is such a world. Knowledge of our states of mind and soul is enough for our needs—and so in his argument with Leibniz Foucher says that the doctrine of bodies which Leibniz

⁺⁺ Lettre, p. 21.

⁴³ Apologie, p. 132, but see the whole argument through to p. 136.

struggled to sustain was "useless". But what he means is that the knowledge we can have and ought to worry about is all somehow within us.⁴⁵

Foucher also thought little of Leibniz's attempt to get outside ourselves and demonstrate a world of independent monads—even though they were clearly not material. Nonetheless in a 1695 letter to Leibniz⁴⁶ he took up Leibniz's notion that the monads were centres of motion, and accepted his idea of substantial forms or at least of the need for a principle of individuation which did not depend on the accidents of things. He notes that if matter is a centre of activity, then so is the soul. Why shouldn't they interact? Indeed, one may take Foucher to be suggesting that if each thing has its own specific mode of interaction, each thing should have its own conditions for interaction, and whether any two things can interact will have to be decided in each individual case. Certainly, as Foucher insists elsewhere, bodies and minds do seem to come to us attached.

His sense that there must be something beyond us—perhaps indeed an external world—was associated with a doubt that the *individual* soul *itself* could cause our ideas of matter even though these ideas were modifications of such a soul. These doubts, though, had to do with the fact that Foucher admitted the universality of natural laws. This could explain why we find a certain resistance to the *esprit*—a resistance that we associate with matter.

Conceivably, then, all the bits do finally fit together. Reality is a kind of world soul or *pensée* within which the individual soul copes with two kinds of motion. But Foucher never produced a finished system. For he always engaged in polemics and critical analyses—ferociously sometimes with Malebranche, gently with Leibniz. His interest was always in the cut and thrust of the argument of the moment. Perhaps, though, a look at his views of religion, reason and skepticism will clarify the situation.

⁴⁶ Journal des Sçavans, 12 September 1695, reprinted in Rabbe Études Philosophiques, appendix, p. CVI.

⁴⁵ See "Reponse de M. S.F. à M. de L.B.Z. sur son nouveau sistème de communication des substances proposé dans les Journaux du 27 juin et 4 juillet 1695", *Journal des Sçavans*, Amsterdam, 12 September 1695, pp. 412–416, reprinted in Paul Janet, ed, *Oeuvres Philosophiques*, Vol. I, pp. 645–648 and in Rabbe, *Études Philosophiques*, pp. CII–CVII. Leibniz's original appeared in the *Journal des Sçavans*, June 27 and July 4, 1695, pp. 194–300 and 301–306.

6. Foucher and Reason

Foucher is convinced that reason works in the sense that we can always associate clusters in a way that enables us to see reason running through whatever reality there is available to us. But our reasonable pictures of the world may always be false. What survives is the principle of reason, not any particular theory. This is now a commonplace. Every physicist believes that every theory that can be put forward is questionable. But every physicist also believes that what will replace any cast-off theory is another theory that reasonably links our experiences. Beyond this we have no certainties.

Foucher talks constantly about reason. For the most part he means what we mean when we speak of "giving and taking" reasons. There are no propositions which simply stand on their own, just as there are no experiences that are simply self-validating.

When he talks of the defence of reason and of its proper use he does not mean the search for self-evident truths or for arguments like that of Descartes' "cogito". The cogito argument might be persuasive, but it appeals to someone for its validation. To assert otherwise is the essence of dogmatism.

Still there is what he calls "le bon sens". He offers a definition: "Je dis donc qu'une chose est conforme au bon-sens, quand elle s'accorde avec des veritez si generales and si evidentes qu'on les comprend de premier coup. Telles sont les veritez que je propose."⁴⁷ We are to look for very general truths which no sane person would deny. But they turn out to methodological principles. Essentially they are the "laws of the académiciens".⁴⁸ These are rules of thumb about how to proceed:

- 1. In philosophy don't proceed otherwise than by demonstration.
- 2. Avoid questions which you can't decide.
- 3. What one does not know one must leave alone.
- 4. Distinguish what you know from what you don't know.
- 5. Always search for new knowledge.

Each rule appeals to someone's judgement; such judgements are fallible. This does not mean that no judgement is better than another.

⁴⁷ Apologie, p. 73.

⁴⁸ Apologie, pp. 44-46.

Philo reviewed the whole history of the Academy and was the better for it. Cicero is worth our time and study. And, of course, there is Plato.

Foucher also does not mean by reason the search for Platonic forms if by those one means something that stands alone, apart from experience. He wants nothing of the thesis that the philosopher might climb to the forms and then throw away the ladder of experience.

Indeed he says we always think of universals through particulars.⁴⁹ This is not, I think, the Berkeleyan doctrine that we do not really grasp universals as such but rather the doctrine that the forms inform things and that it is through this informing that we know them—a doctrine which one might well hold while calling oneself a Platonist. Reason simply puts experiences together in an intelligible pattern.

7. FOUCHER AND RELIGION

We can see this better if we look at Foucher and religion. Foucher was a priest; early on he was made an honorary canon of Dijon, though he mostly lived and worked in Paris. There he worked, as Richard Watson tells us, as a chaplain to a house of religious men in the rue St. Denis. When we think of him we imagine him wandering up the rue St. Jacques trying to persuade the printers to bring out his books or busy writing letters to philosophers like Leibniz, and not on his knees in church. But this may not be quite the whole story.

He could never have denied that his convictions were Christian, for that would have cost him whatever small place he had in society. So we may want to take his religious protestations with a grain of salt. But, though the intellectual landscape certainly contained people whose religious sincerity was open to doubt, there is no reason to doubt Foucher's sincerity. We can look again at what he says in *L'Apologie*. He begins by insisting that the Church fathers were académiciens, but chiefly of the middle and new academy. Among the obviously speculative metaphysicians he mentions Origen and Clement of Alexandria and adds "St. Thomas" even. St. Denis, St. Jerome, and St. Justin also figure.⁵⁰

⁴⁹ Lettre, 1675, p. 41.

⁵⁰ *Apologie*, pp. 3–5.

As he warms to the task, he says that the method of the academicians is best for controlling the libertines.⁵¹ He thinks Plato even had hints of the Trinity, though he says that the academicians should be regarded as disciples of Socrates and not of Plato.

But later on he says that religion depends on what God inspires in the spirit of men.⁵² If I understand him rightly, of course, he means such inspirations to be worked into the systems we build—they will have to be given a context in which they make sense.

8. FOUCHER AND SKEPTICISM

I have been arguing that in fact Foucher was no skeptic, if by that we mean someone who denies all knowledge. He was a skeptic in the sense that one might in our time call Karl Popper a skeptic, for he thought that almost any proposition (apart from those of logic and mathematics and perhaps those asserting the existence of God and the immortality of the soul) could be falsified. But we need to look at the puzzles about skepticism at the time, and through Foucher's eyes.

The ancient skeptics, above all, doubted that we could get valid knowledge of the external world. St. Augustine reminded them that they could not go further than this on logical grounds. To deny that one knows anything at all is self-contradictory, after all. *Contra Academicos* is more than anything else a defence of the notion of logical truth, and this is how Foucher read it. But whether or not logical truths are about an external world was then and is now a debatable question. Foucher appears to be a logical realist in some sense, but he would deny that the reality which logic structures needs to be seen as something beyond the forms of "l'âme", and, as I have said, the question of the nature of "l'âme" and its relation to "l'esprit" is an important one.

In any case, the ancient skeptics all seemed to know a lot about themselves. They knew when they were doubting and when they were believing. Their skepticism centres on notions such as that of the "Stoic criterion".

By Foucher's time the tables were turning. Pascal does not deny that we know a lot about the external world, but he is not sure about

⁵¹ Apologie, p. 18.

⁵² Apologie, p. 29.

knowledge of ourselves. The "wager fragment" begins "infini rien". We have trouble knowing about ourselves. The self is infinite in that it can grasp the whole of reality. But when we look for it in the new scientific world we do not find it at all. It is all and nothing.

One reading of Foucher is that he is simply unmoved by this turn of the tide. But he keeps telling us—even on a title page—that his work is "useful for the sciences". It is not the sciences as ways of putting order on our experiences that he doubts. It is just their finality. He does still think that we know a lot about ourselves, or at least about what we might call the metaphysical underpinnings of human experience. We are open to religious inspiration. And we know that what we know is a set of modifications of "l'âme".

Everything is open to question; but that is not to say that all that we claim to know is mere chaff blowing in the breeze. Indeed it is certainly Foucher's view that those who claim to know too much—Descartes and Malebranche of course—are likely to be the enemies of science. For they claim in effect that open questions are closed.

Foucher did not, however, cast his lot with La Mothe Le Vayer. La Mothe Le Vayer's claim was that extreme skepticism was the best for believers because if everything is open one may believe what one pleases without fear of challenge.⁵⁴

Foucher claims, on the contrary, that the organisation of ideas in the way that he himself proposes provides the seed-bed for revelation. By integrating revelation into our systems of belief we show that religious insight is basically reasonable or at least not contrary to reason and, ideally, that it contributes to our understanding. This is certainly what he wants to say when he claims that the Church fathers profited from the Academy.

If we take his touch of Neoplatonism seriously, then, indeed, he was the philosopher who best stood by the claims of the academy as they were set out, so far as he could (or we can) tell, by Philo of Larissa. He is no Pyhrro. But if we imagine Antiochus as the eclectic who opened the doors to the richness of Alexandrian Neoplatonism, Foucher was no Antiochus, either.

⁵³ The 1676 (Charles Angot) and 1679 (J. B. de la Caille) editions of *Réponse* pour la critique à la preface du second volume de la Recherche de la verité, contain in the subtitle "remarques utiles pour les sciences".

⁵⁴ The sincerity of La Mothe Le Vayer is in dispute. A new study by Philippe-Joseph Salazar, *La Divine Sceptique. Ethique et Rhétorique au 17iéme siécle*, Tubingen: Gunter Narr, 2000, adds depth, but doesn't settle the question.

FOUCHER, HUET, AND THE DOWNFALL OF CARTESIANISM

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In 1970, Gregor Sebba published what was essentially a critical notice of Watson's *Downfall of Cartesianism*. He drew a distinction, versions of which will be familiar to all of us, between "doctrinal analysis" and "historical analysis." The former is "the study of concepts, propositions, doctrines and systems, to determine their precise meaning structure, and internal validity." In some broad sense of the term, it has to do with logic, which stands outside of time. "Historical analysis, by contrast, treats the same material as historical fact, as a object in time to which its precise position in the flux of change is essential and constitutive." This latter enterprise is not a matter of eternal logic but of datable causes.

According to Sebba, Watson claims to be doing at least the latter, but in fact does only the former. Indeed, his exposition of the doctrinal analysis based on Foucher's critique of Malebranche's Cartesianism is "brilliant." "It glaringly demonstrates the hopeless net of contradictions in principles from which Foucher's adversaries could not extricate themselves." But exposing this matter of logic is not by itself to locate the cause of the downfall of the system subscribed to by those adversaries. To underline the prima facie implausibility of trotting out the dates of Foucher's attack on Cartesianism and Malebranches's unsuccessful effort to withstand it (1674–1712), Sebba dramatically suggests a name and date of his own: Isaac Newton, 1687.

¹ "What is History of Philosophy," Journal of the History of Philosophy, 8 (1970) p. 252.

² *Ibid.*, p. 254. In fact, however, Spinoza had a solution to Foucher's difficulties, according to Sebba, and thus Watson had no historical thesis. *Ibid.*, pp. 255–56.

³ The name of Newton appears exactly once in the *Downfall*, in connection with Rohault's *Traité de physique*. Watson relates that "the Newtonian, Samuel Clarke, thought it so good that rather than writing a Newtonian text he translated Rohault's text into Latin, correcting it by adding footnotes from Newton." *Breakdown*, p. 87. The effect is not just to ignore Newton's role, but to roll him into the Cartesian story.

Although he did not do so, Sebba could have cited both Kuhn and Festinger, who from their different perspectives support his view that even severe cognitive dissonance of the sort Foucher ascribed to the Cartesians is not sufficient for relinquishing belief. Still, Sebba's dismissal of Watson's claim to historical analysis might be too quick. Imagine a philosopher who works on a research program until one day he discovers what he takes to be an inconsistency in it. The next day we find him working on a different program. Who would hesitate to ascribe the cause of the shift to his noticing the inconsistency? Action theory over the past three decades has certainly taken seriously the sort of issue that Sebba raises, but it has not upset our appeals to such commonsense explanations.

Now imagine not just one but a whole group of philosophers working on a system. Suppose that a contradiction is claimed to be discovered in the system, after which gradually fewer and fewer adherents to the system are found. Watson's scenario is that the system disappears because of the contradiction. The scenario fails, according to Sebba, because Malebranche doesn't, i.e. didn't, see the contradiction. (And what is true of Malebranche is presumably true of the other die-hard Cartesians.) How do we know this? On the basis of a rational reconstruction far less obvious than anything in Watson:

Foucher demanded a rigorous, non-contradictory solution of the difficulties in the doctrine of representative ideas, showed that the ontological, metaphysical and epistemological principles of his opponents prevented such a solution, and concluded that these principles were *therefore* untenable. This is what Malebranche could not accept, what he could not even understand. In the order of truth, principles were what the name says: first verities; the validity and the very meaning of doctrines derived from them depended on the truth of these principles, not *vice versa.*⁴

The lure of rational reconstruction, of attributing rational motives that are causes precisely because they are rational, is irresistible. Even if the role of principles is for Malebranche as Sebba says it is, what leads Malebranche to take his principles as principles? How comes he to be so infallible and thus fixed in his view of them? The answer is one that comes not from historical analysis, but from doctrinal analysis; they are precisely the principles that seem rationally to us to define his position.

⁴ Loc. cit., p. 257.

Nor is this particularly problematic. Consider the methodolgy proposed by Lauden: employ rational re-construction until it no longer applies, then appeal to causes.⁵ The search for rationality must come first, otherwise the domain is not picked out. Otherwise, how would we know that we are doing the history of philosophy rather than of economics or of physical particles for that matter? To put it another way, unless we can attribute the sort of rationality that seeks to resolve cognitive dissonance of this sort, then historical analysis of is no philosophical significance whatsoever.

The aim here is to propose an hypothesis that should satisfy the most exigent of requirements for Sebba's historical analysis. No claim is made of the sort that Watson seems to have made, that a sufficient reason that is in fact the one and only actual cause of the downfall of Cartesianism has been located. But it would be beyond credibility if the connections traced here, given that they obtain, turned out not to be contributing factors in the downfall of Cartesianism. Moreover, the hypothesis is one based on Foucher's contribution, even if not exactly Watson's version of it.

Another name and date, rather less dramatic than Sebba's suggestion, should be thrown into the hopper: Pierre-Daniel Huet, 1689. The hypothesis is that Foucher contributed to the downfall less by noticing the internal inconsistency of Cartesian principles than by bringing Huet to believe that Cartesianism represented a threat to religion, and that the danger was Descartes's failure to adhere to his own (perfectly acceptable) principles. Of this, much more below. Meanwhile, it might be noted that a disadvantage of Watson's role for Foucher is that he just wasn't well enough known or widely enough read to have had the effect ascribed to him. Malebranche himself did not take Foucher seriously.6 The interest in Foucher by Desgabets, Leibniz and Bayle was exceptional, and the use of him by all three did not add up to a downfall. The first two sought to rebut his critique of Cartesianism, and the appeal to Foucher's arguments in Bayle's Dictionary article on Pyrrho is not in propria persona. To be sure, Foucher's arguments are there, with attribution, ready for cooption by Berkeley and others. But they are employed in Bayle's text by a

⁵ L. Lauden, *Progress and Its Problems* (Berkeley: University of California Press, 1977).

⁶ Because Foucher inadvertently based his *Critique* on the first three books of the *Search*, which appeared as a separate volume in 1674, Malebranche was led to observe that when criticizing a work, the critic ought at least to have read it. Unlike his interminable polemic with Arnauld, Malebranche's dispute with Foucher ended quickly.

Catholic priest for purposes that Bayle cannot have entirely shared. Huet, by contrast, was far more prominent, and his Censura philosophiae cartesianae (1689) quickly went through four editions in five years. While Foucher's work became hard to find because it fell into oblivion. Huet's work became hard to find because it was being bought up. The contrast between the negative reactions to their work is also instructive. Foucher was dismissed and ignored. Huet was jumped upon by the professorial elite. The response that Huet describes in his foreword to the expanded edition was international; it came from Eberhard Schweling, professor at Bremen, Johannes Schotanus, professor at Francker, Andreas Petermann, professor at Leipzig, Burchard De Volder, professor at Leiden, and others. The step-by-step refutation of the Censura, or the attempt thereat, even was used as a student exercise at the University of Leiden. Whether by default or by election, Pierre-Sylvain Regis, whom Huet dubbed the "Prince of the Cartesians," was the principal voice, though not the only one, responding among the French Cartesians. The very scope and fury of this reaction to Huet's attack show how effective it in fact was. Certainly, the perceived threat represented by the attack is thereby evidenced.

Huet's Censura was far more extensive, and arguably no less devastating than Foucher's Critique. Huet expresses worries of the sort that exercised Foucher over the inability of the Cartesian theory of ideas to deliver knowledge of an external world. But the work is far more comprehensive than that. There are eight chapters, the first seven of which deal with the method of doubt, the criteria of clarity and distinctness, the nature of the human mind, proofs for the existence of God, the nature of body and the void, the genesis of the world, and the cause of gravity. The discussion of the philosophical topics, which is most of the work, is even by modern standards of very high caliber. The discussion of the cogito in particular is unsurpassed, certainly in length, until the twentieth-century work of Gouhier and Gueroult. But this is only part of the story.

Huet began a rebuttal of Regis's *Réponse* with annotations to it that found their way into the greatly expanded edition of the *Censura* of 1694. But these annotations end, as does the manuscript response that Huet began writing, abruptly in chapter two of the *Censura*. It may be that Huet at that point came to realize that the detailed philosophical response he was preparing was an inappropriate way to serve his primary motivation. At any rate, in 1692 he published his *Nouveaux mémoires*, the notorious spoof of Cartesianism whose

premise is that, reports of his death notwithstanding, Descartes was alive and teaching philosophy in Lapland. The importance of the shift in strategy represented by this work might be enormous. The real downfall of Cartesianism occurs not when its positions are refuted, but when they are made to seem ridiculous—just as Aristotelian scholasticism, for example, dies not with Descartes but with Molière. Nor was Huet the only one to make this shift in dealing with Cartesianism. The Jesuit Daniel had already made it with his *Voyage de Descartes* of 1690.

To understand this apparent shift in strategy, it is important to begin with an earlier, even more dramatic shift. Huet indicates in his memoirs that as a young man he was a fellow traveler of the Cartesians. When Descartes published his *Principles*,

I could not rest until I had procured and thoroughly perused his book; and I cannot easily express the admiration which this new mode of philosophizing excited in my young mind [which was ignorant of the ancient sects], when, from the simplest and plainest principles, I saw so many dazzling wonders brought forth, and the whole fabric of the world and the nature of things, as it were, spontaneously springing into existence. In fact, I was for many years closely engaged in the study of Cartesianism, and especially when I beheld so many grave and learned men in Holland and Germany attached to it as if by a kind of fascination; and I long wandered in the mazes of this reasoning delirium, till mature years and a full examination of the system from its foundations, compelled me to renounce it, as I obtained demonstrative proof that it was a baseless structure, and tottered from the very ground.

The wholesale and bitter rejection of Cartesianism seems precisely datable to the summer of 1674, when Huet read the first three books of Malebranche's *Search After Truth*. There he found his antiquarian values ridiculed in a way that he attributed to the "pride, arrogance and vanity" that he came to see as an attribute not only of Malebranche, but of Descartes and his followers generally.¹⁰ While working

⁷ & vetarum Sectarum rudi.

⁸ Ac per multos certe annos arctissime [read: artissime] devinctum me tenuit Cartesianae factionis studium. *Commentarius de rebus ad eum pertinentibus* (The Hague, 1718). The standard French translation rather overstates Huet's devotion to Cartesianism at this point: "Durant plusieurs années, j'appartins corps et ame au cartésianisme..." *Mémoires*, trans. Ch. Nisart. (Paris, 1853) p. 23.

⁹ Huet: Memoirs, trans. John Aikin (London, 1810) vol. 1, pp. 29-30.

¹⁰ For more on this perception of Cartesianism, see Thomas M. Lennon, "Huet, Malebranche and The Birth of Skepticism," in *The Return of Skepticism: From Hobbes and Descartes to Bayle*, ed G. Paganini (Dordrecht: Kluwer, to appear).

on his rebuttal of Regis. Huet might have come to realize that the appropriate way to deal with the root problem of Cartesianism, viz. its ridiculous pride, arrogance and vanity, was to treat it with ridicule. But why, then, did Huet wait fifteen years before publishing the Censura itself? The question is rather complicated, involving Huet's relation to royal policy, which was actively hostile to Cartesianism. One version of the story, from Mme de Sévigné for example, was that Huet's attack on Cartesianism was designed to curry royal favor for venal reasons of career advancement. Another, more favorable motivation is to be found in Huet's dedicatory epistle to Montausier, governor of his region, who allegedly urged him to publish for religious reasons. It may be that Huet in fact agreed to publish because he in fact shared the royal perception of Cartesianism as a threat to church and state. 11 At any rate, there is still the question of why Huet waited so long, or more relevantly, why at a certain point did he wait no longer? What awakened Huet from his skeptical slumber? The occasional cause may well have been Foucher, who got Huet to see that an attack on Cartesianism would be of a piece with the Christian apologetic that was then independently engaging him.

Preserved in the "Carteggio Huet" of the Bibliotecca Laurenziana in Florence are three unpublished letters of Foucher, dated 13 June 1685, 13 July 1685 and 23 September 1690. They are not explicitly addressed to Huet, but it is clear that he was the addressee. The first of the letters contains what purports to be a copy of (at least a draft of) his *Apologie des Académiciens*,

which concerns you personally. I would ask that you let me know if it pleases you. I write this apology in the form of a letter with the epistolary style, which seems to me appropriate for saying a great deal in few words, and without affectation or constraint.

That Huet is the addressee is clear from Foucher's urging him to make good on the promise made in the *Demonstratio Evangelica*. (What Foucher took the promise to be we can only guess.)¹³ In any case, Huet is asked to be the judge of the dispute between Foucher and

¹¹ For more on Huet's motivation, see the editor's introduction to Huet's *Censura*, translated as *Against Cartesianism* (Amherst, NY: Prometheus, to appear).

¹² See Pelissier, Léon-G., Inventaire sommaire des papiers de Pierre-Daniel Huet conservés dans les fond Ashburnham à la Bibliothèque Laurentienne (Florence) (Paris: Librairie Emile Bouillon, 1900).

¹³ My superficial look at the Demonstratio revealed no promise on Huet's part.

Desgabets (unnamed, but clearly intended) over Foucher's critique of Malebranche's Search After Truth. 14 It looks as if Foucher at this point was offering, or asking, to dedicate the work to Huet, placing it under his protection in the fashion of seventeenth-century protocols. In the event, the Apologie appeared without a dedication or the epistolary form, and significantly altered in wording from the draft of this letter.

The second letter contains a draft of the conclusion of the *Apologie*, which makes it clear that Huet is the addressee. The Academic philosophy best serves the faith, as the *Demonstratio* showed, by removing fallacies, equivocations, etc. The third letter congratulates Huet on having shown in *De concordia rationis et fidei* how well the views of Plato agree with Christianity, especially on the Trinity and the divine word. Reason and philosophy lead to faith, as Huet shows; reason without religion leads to to libertinage, religion without reason leads to superstition.

Foucher's first letter says that with the *Apologie* he was making good on a debt of ten years' standing. This is a reference to the dispute that Foucher mentions with Desgabets, who had replied to to Foucher's *Critique* of Malebranche with his own *Critique de la critique*. ¹⁵ But, according to Watson, although Foucher had to wait four years till a publisher for it was found, he had written a *Réponse* to Desgabets immediately upon the appearance of Desgabets's *Critique de la critique*. ¹⁶ Why, then, did Foucher write a second reply to Desgabets?

The preface to the *Apologie* explains that while the work is an occasional piece, in response to Desgabets, it also stands on its own. He had already responded point by point to Desgabets, and here he focuses only on the Academics. "It is of no little importance to show that their way of philosophizing comports with religion, because, as it conforms with common sense, it is also attractive to decent and intelligent people," especially at a time when "the contrariness of dogmatists was stirring up trouble for people with their opinions." It is not unlikely that Foucher here was referring to the bitter debate between Malebranche and Arnauld over the nature of ideas that had

¹⁴ For more on the Desgabets-Foucher exchange, see *Breakdown*, pp. 79ff.

¹⁵ Not that the effort was welcomed by Malebranche, who commented, "it seems to me that those who involve themselves in attacking or defending others should read their works with some care in order fully to understand their views." *Oeuvres complètes*, ed. G. Rodis-Lewis (Paris: J. Vrin, 1959) II, 500.

¹⁶ *Ibid.*, p. 82.

erupted in the early 1680's. This preface thus gives the intended substance of the work and the occasion for its production. But it does not explain how a defense of the Academics counts as a reply to Desgabets or is in any way related to his defense of Cartesianism.

The philosophical objections based on the likeness principle on which the downfall of Cartesianism was predicated were satisfactorily addressed by Foucher, certainly according to Watson. But Desgabets also saw theological difficulties stemming from these objections that had not been fully answered. If, as Foucher holds, ideas of extension are, like sensations, modifications of the mind, and, if, as he also holds, resemblance is required for representation, then since, according to Desgabets's fundamental principle of all knowledge, 17 ideas do represent, the mind must be extended, with horrendous consequences for the immortality of the soul. Moreover, if as Foucher holds, we do not know the essence either of the mind or of the body, then for all we know, the essence of both might be the same, and that essence might be material—again with horrendous consequences for immortality. Now, Foucher's reply in 1679 seems not to have fully addressed the theological worries of Desgabets, as perhaps it should have (both were priests, as was Malebranche, of course, who occasioned the whole exchange). He then saw as the only danger dogmatic pronouncements of the sort that Desgabets was apparently making, and which he avoided by pointedly not asserting materialism.¹⁸ That is, the consequences that worried Desgabets do not follow because for a skeptic such as Foucher nothing follows. More than this was needed, however, and someone with Huet's ecclesiastical standing would be the one to decide whether it had been supplied. In addition, he would be likely to favor the Academic skepticism that Foucher was peddling as an answer to the theological concerns of Desgabets.

Watson cites from Foucher the "great maxim" of the Academics as follows: "they recognize as a rule only evident truth, and faith when it is lacking, in fide et veritate." To be sure, he earlier had said that

¹⁷ This is the principle, whose importance cannot be overestimated, that "all our simple ideas always have a real object outside the understanding which is in itself such as it is represented." Cited by Watson, p. 80. Watson's work on Desgabets was not the least of his contributions. Before the *Studia Cartesiana* publication of Desgabets's philosophical works, he saw precisely what was important in Lemaire's *Le cartésianisme chez les Bénédictins* (1901) for understanding Desgabets's defense of Cartesianism, in particular his principle of intentionality.

¹⁸ Breakdown, pp. 81-83.

¹⁹ Breakdown, p. 37.

he would not question Foucher's interpretations of Academic skepticism "beyond remarking that they are somewhat free, perhaps because one of [Foucher's] intents is to show that Academic principles are most fitted to lead one to Christianity."20 The whole context in which Watson places this "maxim," however, rather obscures the significance that Foucher assigns to it. Foucher's only intent in citing it is theological. It comes at the end of his apology for the wise man of the Academics, who "does not conduct himself on the basis of mere opinions." The obvious problem is that such a stance seems on the face of it to preclude anything based on faith. To answer the difficulty, Foucher distinguishes between opinion and faith, citing Augustine's De utilitate credendi. "Faith is laudable when it is based on reasonable motives; but opinion is never legitimate and must always be rejected . . . because opinion excludes the search for truth on the assumption of knowing what in fact is not known." By contrast, "the Academics conduct themselves on the basis of understanding or faith, whether human or divine, not opinion."21 Opinion is a source of mischief, both in philosophy and theology. Because it varies over time and from one person to another, it produces heresy and discord.

All legitimate faith agrees with truth and evidence; and although we might believe things that are not evident, it is nonetheless evident that we should believe it if God orders us to do so. And if we must not always follow our individual reason, this is because it is not always reasonable to do so; now, it is not reasonable to follow reason in things that we do not understand; we should not form a particular judgment on these things.²²

It is precisely at this point that Foucher cites the great maxim of the Academics.²³

While Foucher draws attention to Augustine for the faith-opinion distinction, he does not cite chapter and verse. The full citation is to be found, however, in the Objections to the *Meditations* from Arnauld,

²⁰ *Ibid.*, p. 36.

²¹ L'apologie des Académiciens (Paris, 1687) p. 55.

²² Ibid., p. 56. See also pp. 102-04, where Foucher defends the Academic's relation to opinion on rather different, though not necessarily incompatible grounds. The Academic bases his actions on opinion, he says, only for matters in the *forum externum*, where there is no other choice given the diversity of men's views. But in the *forum internum* of conscience, judgment should be suspended and the truth sought.

²³ Foucher also cites St. Leo and Paul's epistle to the Colossians, thus making the religious context fully clear, which is the main point here.

who certainly knew his Augustine and who might well have been Foucher's source.²⁴ Arnauld cited the distinction in raising the objection against Descartes that Foucher defended the Academic against, viz. that the proscription of opinion, or the acceptance only of what is clearly and distinctly perceived to be true, was prejudicial to the faith. Now Descartes's reply to Arnauld would have confirmed for Foucher, and certainly for Huet, exactly the worries that Arnauld was raising. For although Descartes basically does what Arnauld invited him to do, he simply makes an exception to his clarity rule for "matters which belong to faith and the conduct of life." In response to Arnauld, he adds a sentence to the Synopsis that does just this. ²⁶

The rest of the Apologie is, like the great maxim of the Academics, focused on theology. It is an apology for the Academics in that it shows how "their philosophy is most useful to religion," which is the title of the first of its four parts, the first article being that the Fathers of the Church were Academics. The second part argues that despite the title of his Against the Academics, Augustine was actually in favor of the Academics. The third part tries to accord the Academic philosophy with common sense. It is here that Foucher attempts to show that Descartes initially bases his philosophy on the principles of the Academics, but then goes astray when he relinquishes those principles. Finally, the fourth part tries to show that the Academic manner of philosophizing leads to important principles and truths, such as the immortality of the soul, the existence of God, Providence and the faith itself. We might now return to the question as to why Huet delays fifteen years before writing the Censura. If he is prompted by Foucher, it is because he sees that Cartesianism is a threat to religion, and because he sees what the prophylactic is to that danger.

After seven chapters of unrelenting, devastating, and detailed philosophical criticism, Huet in the eighth of the *Censura* turns to a "general evaluation of the Cartesian philosophy." He expresses some

²⁴ CSM II, 151-52.

²⁵ CSM II, 172.

²⁶ Descartes also draws attention to Replies II, however, where he answered a similar worry from Mersenne, and did so in terms that should have satisfied both Foucher and Huet. CSM II, 195–96. Mersenne had raised the problem of the Turk who embraces the true religion for the wrong reasons. Descartes replies by asserting the necessity and sufficiency of conscience. Although the faith may be obscure, indeed is obscurity itself, there are reasons for accepting it, he says, that must be accepted in good faith. See also the letter to Clerselier, CSM II, 272–3. For more on this topic, see Thomas M. Lennon, "Faith and Reason: John Paul II and Descartes," *The Modern Schoolman* 78 (2001) pp. 301–316.

praise for it (genuine, it would seem) and explains why it has enjoyed the success it has. Before turning to the virtues and faults of Descartes himself, he sets out "a list of stains on the Cartesian philosophy." There are five such, four of them philosophical: it is inconsistent, is based on falsehoods, involves faulty causal inferences, and uses a faulty method. The greatest blemish, certainly the one developed at far greatest length, is that it "offends the faith." How so?

The short of the story is that Huet foresaw that Descartes helped open the way to what later would be called deism: what can be known at all can be known on the basis of reason; faith is in principle superfluous and dispensable; while God might exist He is the God of the philosophers, not the God of Abraham and Isaac, etc. This deistic drift is apparent to Huet in Descartes's arrogant view that since his philosophical views are true, and since truth never conflicts with truth, the truths of the faith are not opposed to them. It was because he saw that in fact the truths of faith were in conflict with what he took to be the dictates of reason that Descartes was led to his bizarre view that all truth depends on the divine will, that as a result God can do what is impossible and self-contradictory. Thinking that he was thereby extending the power of God, Descartes did not realize that he was in fact restricting it. Following the Lateran Council, Descartes should have seen, for example, that since his view that nothing can be made from nothing was contrary to the faith, it was false. Descartes's followers "have been no more modest than their leader." They place reason above faith in everything and restrict the relevance of Scripture to the Jews.

Everywhere do the Cartesians weigh things of the Faith on the scales of reason, and they seek explanations of God's decrees. Others from this sect confidently assert that whatever Christ established among the people concerning the darkness, fire, and punishment of hell was figurative language designed to terrify and cause dread in them.... Some of Descartes's circle have come right out and said openly that the decrees of the Faith do not come to us other than by analogy. And one of them has written that the idea of matter does not require creation, and that nothing can be created.²⁷

²⁷ Huet may be reading Noel Aubert de Versé and Spinoza as Cartesians. For more on them with respect to the creation issue, see Thomas M. Lennon, "The Cartesian Dialectic of Creation," *The Cambridge History of Philosophy*, ed. D. Garber & M. Ayers, (Cambridge: Cambridge University Press, 1998) pp. 340-41. He may also be intending L. Meyer, B. Bekker and others; see F. Bouillier, *Histoire de la philosophie cartésienne* (Paris, 3rd ed. 1868) vol. 1, pp. 309ff.

The Spinozist drift of Cartesianism is underlined as Huet goes on to criticize Descartes for eliminating consideration of final causes, which makes the notion of Providence useless or unintelligible, for introducing an instrumentalist view of moral commands, for proposing a doctrine of body incompatible with the Eucharist, and for making the world infinite. Huet's motivation for publicly attacking Cartesianism could not be stronger or more obvious.

By way of conclusion, brief answers to two additional questions might be indicated. First, why is the Foucher-Huet connection so important? There are several reasons. One is the obvious reason that has been focused on here, viz. that Foucher precipitated the terminal attack on Cartesianism. But in addition, the connection better enables us to understand Huet, who too often has been taken to be a skeptic of the Pyrrhonian sort. If he is a skeptic, he is rather an Academic. In addition, if as Foucher and Huet claim, Descartes goes astray when he departs from his own (Academic) principles, then the downfall of Cartesianism is a collapse from within, not a demise brought about by extramural attack. Given the putative importance of the connection, it needs to be asked whether Huet read or even looked at Foucher's Apologie, since the proffered dedication of it to him never materialized. That Huet at least looked at the Apologie is beyond doubt. We have his copy of the work, complete with his coat of arms.²⁸ What we do not have, alas, is the set of annotations that should have appeared in that copy if he did a detailed study of the work.

²⁸ Bibliothèque Nationale, Paris, côte R.2231.

WITTGENSTEIN'S EVIL DEMON

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Wittgenstein has invented a new form of skepticism. Personally I am inclined to regard it as the most radical and original skeptical problem that philosophy has seen to date.... Wittgenstein's main problem is that it appears he has shown all language, all concept formation, to be impossible, indeed unintelligible. (Kripke, Wittgenstein on Rules and Private Language, p. 60)

In The Breakdown of Cartesian Metaphysics and his earlier, seminal The Downfall of Cartesianism, Watson sets the tone for many contemporary discussions of Descartes. For example, it is de rigeur for almost any work on philosophy of mind to begin by attacking Descartes's theory of the mental. The emphasis is often on Cartesian dualism, and the impossibility of solving the interaction problem if there are two kinds of entities.2 How do we secure mind's place in nature with such a scheme? Watson helps set the parameters of these discussions by emphasizing the immateriality of mental stuff; he sees the introduction of dualism and the characterization of the mental as primarily religiously motivated.3 We think the attacks on Descartes misplace the emphasis. Descartes was a dualist, we have argued elsewhere, because he sees that mental properties are radically different in kind from physical ones.4 What is crucial is not the notion of some immaterial stuff. but that of a property that is radically different in its logical behavior from other properties that we generally classify as physical, namely an intentional one. 5 That this simple point has been so often missed is evidenced by the fact that Descartes's modern detractors, almost

¹ In this discussion we have made use of the later book only.

² See Fodor, pp. 114ff.

³ See Alan Hausman, 'Watson's The Breakdown of Cartesian Metaphysics'.

⁴ Hausman and Hausman, Chapter 2.

⁵ We use the term in a technical sense discussed in our book, pp. 19-21. For a full explication see Bergmann's 'Acts' and 'Intentionality'.

to a person, engage the problem of the nature of this very property.⁶

A second Cartesian discussion—not, as we shall show, unrelated to the first—has been given renewed interest by Kripke's work on Wittgenstein. In his Wittgenstein on Rules and Private Language Kripke argues that Wittgenstein in the Philosophical Investigations presents a new form of skepticism which goes beyond anything presented before him, including Hume and, for our purposes, Descartes's 'evil demon argument.' This is a startling claim. Popkin, for example, in a series of papers and books has argued that Descartes and Hume exhaust the skeptical territory. If Kripke is correct, Popkin is wrong—although, as we shall argue, the dimensions of Cartesian skepticism are wider than Kripke envisions.

In *Descartes's Legacy*, we expressed the belief that the study of the history of the theory of ideas, through the lens of Descartes's theory of intentionality, could shed light on contemporary problems in the philosophy of mind. Such illumination often goes in both directions. Contemporary functionalist theory of mind enabled us to structure Descartes's problems in what we believed to be a new way. In this essay, we will illustrate in detail how such two-way illumination works. By examining the relationship between the extreme Cartesian skepticism of the evil demon hypothesis and Wittgenstein's argument in the *Philosophical Investigations* about rules and private language, we hope to bring clarity to *both* views.

Kripke, as seen in the quotation above, does not hesitate to label Wittgenstein's argument skeptical, though he knows Wittgenstein himself might not have agreed. Indeed, we accept as basically correct Kripke's brilliant analysis of what has come to be called the rule following argument in the *Investigations*. This is the alleged new form of skepticism. However, we believe Kripke is not quite correct when he credits Wittgenstein with a form of skepticism not heretofore seen. This point is not merely of historical interest. We argue in this paper that one reasonable construal of Descartes's evil demon hypothesis

⁶ See Kim pp. 101–02, Fodor, and Searle. Fodor, in all his recent works, has been chasing after an explication of the intentional, and Searle makes this quest a centerpiece.

⁷ See Popkin, *The High Road to Pyrrhonism*, p. 11, and *History*, pp. 17ff. Popkin discusses the extreme skepticism of the demon in which everything can be doubted, but as we argue, Descartes did not see 'everything' as including the very meaning of our thoughts. Popkin's skeptical debates have to do with believing falsehoods.

⁸ By this we do *not* mean that we endorse the conclusions of the rule following argument. But as we say at the end of this essay, we don't know how to refute them, either.

shows that he to some important degree anticipates Kripke's Wittgenstein with respect to problems about the establishment of meaning. Descartes's way out, his theory of intentionality, highlights the central semantic issues engaged by Wittgenstein in the private language argument, e.g. naming a property like greeness in a 'baptismal' ceremony. Kripke argues that the private language argument, so heralded by so many, is actually a corollary of the rule following argument's skepticism. As we examine this claim, our discussion will center on the issue of whether the rule following argument is fatal to Descartes's own solutions to difficulties the demon raises about meaning. The views in the Tractatus that Wittgenstein now repudiates, a reference theory of meaning, a picture theory of language, a correspondence theory of truth are also the cornerstone of Descartes's intentional theory. The appeal of this theory cluster has been tremendously powerful in Western thought since the Greeks, bolstered by the mathematization of nature in the 17th century. The world has a mathematical structure, logic is the foundation of mathematics, the world has a logical structure—these ideas of the Tractatus seem to be enlightened commonsense, not the embodiment of a philosophical theory. This is in part what makes Wittgenstein's argument so shocking.

We proceed as follows. First, we shall examine an aspect of the evil demon hypothesis that engages semantic theory at its deepest level. That aspect is portrayed by Margaret Wilson in her work on Descartes.⁹ Descartes's own answer to the puzzle Wilson describes is in terms of a theory of the intentionality of ideas. Next we develop Kripke's version of Wittgenstein's rule following argument. There are good reasons to believe that in fact this argument is stronger than Wilson's. If this is correct, the issue becomes one over the intentionality of ideas—can such a theory defeat even Wittgenstein's skepticism? We have reluctantly concluded that a Cartesian position cannot save us from Wittgenstein's skeptical attack.

PART I: DESCARTES'S EVIL DEMON

In famous passages in the *Meditations*, Descartes introduces a strategy, the evil demon hypothesis, which challenges a philosophical view of knowledge. Given that any coherent theory of our knowledge of the

⁹ Wilson pp. 102ff., specially pp. 107-12.

external world, including the world of mathematics and science, uses some sort of information model in which—to put it simply—we have thoughts that in some sense represent things, how can we place a reasonable bet on the accuracy of those thoughts?

In Descartes's Legacy, we tried to show that the demon hypothesis should be considered a multifaceted attack on 'representationalism.'10 Of relevance here is the issue, as some philosophers have put it, whether we can escape the circle of our own ideas. Traditionally, the escape is considered to depend on Descartes's proof that our idea of God must represent Him. However, materially false ideas like color ideas appear to represent something to us, when—Descartes appears to say—they represent nothing. If that were true, Margaret Wilson argues, the infection could easily spread to all our ideas even to our idea of God. This worry, we believe, can be made much more precise using Descartes's discussion of the material falsity problem in the *Meditations* and other works. Seen in the proper light, the material falsity doctrine shows how Descartes forges his escape from a worst case demon scenario: the demon makes us believe that an idea is meaningful, when in fact it is not. There is a relevant translation of this problem in Kripke's reading of Wittgenstein: a certain sort of philosopher (the traditional picture theorist) believes ideas have meaning because they are about something. But, given the very assumptions of the philosopher's theory of meaning, the ideas cannot have meaning in that way. We shall return to this point in Part II.

Descartes holds the doctrine in the *Meditations* that all ideas are as if of things. That is, all ideas appear to present possibilities to us. To know what an idea is of is to know the conditions under which it would be true; more accurately in the case of a quality, we know what it would be like for a thing to have it. We can fruitfully introduce here a notion of meaning: if an idea presents such a possibility, then the words which express the idea are correspondingly meaningful. We will in this paper talk both about the meaning of words and the meaning of ideas. Certainly, a meaningless expres-

¹⁰ In what follows we make liberal use of our arguments in our book, but also add to them, especially concerning the doctrine of semantically simple ideas.

¹¹ If one thinks in terms of first order logic, then the introduction of a predicate constant is tied to some semantic theory or other. For our purposes one can think of the semantic rule for a predicate 'F' as the condition under which it is true to say that something is F, thereby linking the introduction of predicate constants to truth conditions.

sion in a language is one that does not, as it were, present a possibility, because there would be no idea which the expression expresses, and so no truth conditions to consider. A meaningful expression does present a possibility, it has a truth value. Could the demon, then, make it appear as if a thought presented a possibility, when in fact it did not? For example, could we believe we know the truth conditions for the thought expressed by 'This is a red thing', when in fact we do not know them? Both Wilson's Descartes and Kripke's Wittgenstein say 'yes'. Descartes, we shall now argue, recognizes the seriousness of this problem and attempts to deal with it.

Descartes denies the existence of so-called secondary qualities, e.g., colors, smells, in the actual physical world. Wilson in effect expresses this denial by claiming that for Descartes, color ideas have representational character without having objective reality. 12 An idea has representational character when it seems to be about something, but if it lacks objective reality it is in fact about nothing. If it seems to be about something, then we believe we know its truth conditions; if it lacks objective reality, then it has no truth conditions. A presented color may seem to be a quality of something but in fact is not a quality at all; there are no truth conditions for the application of 'red' as a quality. Thus the worst demon appears to have a foothold. Wilson believes that this causes Descartes grave difficulties, since there is no obvious way of saying which ideas have genuine as opposed to only apparent objective reality. Wilson may indeed be right in her worries with respect to what Descartes says in the Meditations, but as we have argued elsewhere, an examination of the problem in his later works shows he recognizes that he himself had misconstrued the whole discussion of secondary qualities relative to his theory of objective reality.¹³

With respect to ideas like that of a unicorn, it may seem that since there are no unicorns the idea of a unicorn has no objective reality. Emphasizing this point, however, misconstrues what the theory of objective reality does for Descartes. It does not guarantee the

¹² Wilson, p. 109.

¹³ To be fair to Wilson, the basis of her claim that color ideas have no objective reality is that they have no causes in the way that ideas that have genuine objective reality do, e.g., the idea of God. There is certainly room for this view given Descartes's language. We develop this point at length in *Descartes's Legacy*. For our purposes here, however, the point as we express it makes the logical contrast we wish to pursue.

existence of a physical world, but rather the existence of possibilities—the 'as if of things' theory guarantees that our thoughts have meaning. Ours may not be a world in which there are unicorns, but we know what such a world would be like.

Descartes makes a crucial distinction here in a famous Meditation passage. In essence, there are simple ideas that are the basis of intelligibility of all the rest.¹⁴ Indeed, Descartes's example here is of colors—the very ideas Wilson claims, because of Descartes's distinction between primary and secondary qualities, and his notion of material falsity, that illustrate her point. These ideas have objective reality their truth conditions *must* be as they appear to be. There may not be any unicorns and there may not be any red things, but their possibility is guaranteed by Descartes's view that simple ideas necessarily correspond to something outside themselves. 15 It is a necessary truth that the thought represents, intends, what it appears to intend. 16 This intrinsic semantics, strange to the contemporary ear, contrasts sharply with the view that one 'assigns' a semantics to a thought, whatever a thought on analysis turns out to be. But, if the meaning of a thought cannot, as it were, be read from it alone, then how would one know how to assign a semantics to that thought?17 If a thought does not consist of formed concepts (to use Kripke's terms in the opening quotation of this paper), how would the concepts and hence the thought be formed? One would have to have a notion of meaning already, which simply pushes the problem back one crucial step. Thus, in this sense, to assign a meaning is to already know it, a circularity that gives rise to a regress. This is the full explication of the nemesis of the meaning demon—a semantics given externally is impossible. Without an intrinsic semantics for thoughts, the assignment of truth

¹⁴ CSM II, p. 25.

¹⁵ Descartes forges this guarantee using a causal principle that basically relies on the doctrine that something cannot come from nothing, and he believes the content of his simple ideas comes from outside himself. Whether or not this is true, the content, to obey the principle, must come from outside the idea.

¹⁶ In his unjustly neglected works on intentionality, Bergmann argues that if one represents a thought by placing quotation marks around a sentence, e.g., 'this is green', then that representation *means* that this is green. The statement "This is green" means this is green' is taken to be a necessary truth, in that Bergmann gives rules for its truth conditions that make it necessary. See his 'Intentionality', and 'Acts'.

¹⁷ Descartes's intuition here, we would guess, is that if one believes one is thinking about one's mother, it makes no sense to say one is really thinking about one's Uncle Harry, Freud notwithstanding. But functionalists challenge this certainty with their view that ideas are meaningful only contextually.

conditions to them becomes arbitrary—in that sense, the demon can indeed make us believe we know something we don't really know. Descartes sees this, we think, if not fully in the *Meditations* then certainly by the time he gets to *Comments on a Certain Broadsheet*.¹⁸

Our point really comes to this (one which we believe we could defend at length but will only *suggest* here): What anchors a theory that depends on some sort of correspondence—whether between signs and signified, ideas and what they are about, or pictures and what they are of—is a relation that needs no criterion, no rule for its application, a guaranteed connection between signified and signifier. In providing an intrinsic semantics, Descartes believes he has overcome the most crucial aspect of the demon; the issue of the truth of the thought is logically secondary to the meaning of the thought. It is this guarantee that Wittgenstein attacks in the rule following argument.

PART II: WITTGENSTEIN'S EVIL DEMON

Wittgenstein's attack in the *Investigations*, as Kripke makes clear, is not on our commonsense beliefs about meaning, i.e., that we know what we mean when we speak, and we know what we are thinking of when we think. Rather, it is on a philosophical construal of commonsense which Wittgenstein believes leads to an unacceptable conclusion, that none of us know what we mean by our own words and, by extension, our own thoughts. As Kripke reconstructs this skepticism, it is an attack on an *approach* to semantic issues, from what has been called the first person point of view. In a certain sense the private language argument is an attack on first person semantics, in favor of socially constructed meaning—a third person point of view.¹⁹

Kripke illustrates the essence of the rule following argument by using Goodman's grue problem, then extending its use. Goodman wants to know what justifies our belief, if all examined emeralds up to now have been green, that the next examined emerald will be green. The problem is that there is another property that equally fits all examined emeralds, namely grue, where something is grue if

¹⁸ See Comments on a Certain Broadsheet, CSM I, p. 304.

¹⁹ We are not suggesting that all third person viewpoints would escape Wittgenstein's skepticism. In particular the semantic views favored by functionalists might well fall, as Kripke suggests, to the rule following argument. See Kripke, p. 35 fn. 24.

it is examined before time t and green, or it is blue after t.²⁰ Thus the evidence so far also supports the claim that all emeralds are grue, and that the next examined emerald will be blue as well as grue, and clearly the evidence before t, if we limit it to the class of examined emeralds, does not allow us to decide which is the more reasonable hypothesis. Goodman assumes to state his problem that we know the difference between these two hypotheses, in the sense that they have different truth conditions, so that we must admit that each hypothesis yields a different result after t. Enter Kripke's Wittgenstein. How, he asks, given the grue hypothesis and the evidence for it, do we know that it isn't that hypothesis rather than the hypothesis that all emeralds are green that we meant all along? That is, how do we know that by 'green' we did not mean 'grue'? Is there anything in our past practice or in our thoughts that would enable me, or even God, to distinguish the one possibility from the other?

It has been supposed that all I need to do to determine my use of the word 'green' is to have an image, a sample, of green that I bring to mind whenever I apply the word in the future. When I use this to justify my application of 'green' to a new object, should not the sceptical problem be obvious to any reader of Goodman? Perhaps by 'green' in the past I meant grue, and the color image, which indeed was grue, was meant to direct me to apply the word 'green' to grue objects always. If the blue object before me now is grue, then it falls in the extension of 'green', as I meant it in the past. It is no help to suppose that in the past I stipulated that 'green' was to apply to all and only those things 'of the same color as' the sample. The sceptic can reinterpret 'same color' as same schmolor, where things have the same schmolor if....²¹

The thrust of this argument is against the use of a rule based on a past identification to justify one's use of 'green' in a present case. That is the rule following argument, of which much more below. But here is the main idea: Suppose that, as implied above, we impress on ourselves the connection between a sign and a sensation in what we shall call a baptism ceremony, and then attempt to identify a new sensation.²² There is in the term 'impress', a reference to a rule: call

²⁰ Strictly speaking this is not Goodman's original definition of 'grue' but it is the one Kripke uses. See his fn. 15, p. 20.

²¹ Kripke, p. 20. See also his footnotes 15 and 16 on that page. 'Schmolor' will be defined similarly to grue, in that two things will have the same schmolor if they are both grue.

²² The term 'impress' is Wittgenstein's. See *Philosophical Investigations*, p. 92^c and our later discussion of this passage.

anything green that is like the one we baptized as green. Now if we cite this rule as our justification for calling the current sensation green the skeptic asks us to justify our claim that by this rule we did not mean some non-standard notion of 'like', e.g., x is like y if before t both have φ , but after t, x (the later one) has φ . The skeptic points out that one's past *practice* conforms to either usage, in that any *instances* of the rule conform to either usage. We must then reply that we intended likeness in the standard sense, and give a rule for interpreting it. But now we are claiming that our present use of 'like' conforms to that rule, and we are off again onto the same sort of issue—our current use of 'like' is the same as our past usage.

There are many solutions that come to mind immediately that Kripke convincingly dispatches. We will not try to reproduce here the many difficult discussions that lead to these dispatches. Our concern is with one answer that directly ties to Descartes's meaning demon, one that seems commonsensically obvious. We know the difference between green²³ and grue, and we have known it all along. In the past, when we have seen an emerald, we have labeled it green, and we knew to do that because at one point in our intellectual career, we were taught the meaning of 'green', or taught it to ourselves. It is the logic of these moves that we will now explore.

The essence of Kripke's argument is a simple reductio. If there is a genuine difference between 'green' as we have meant it in the past, and 'grue', as we would have meant it in the past had we even thought of it, then there is some fact of the matter that distinguishes them. But for Wittgenstein, there is no fact about our past usage that distinguishes between our having meant grue and our having meant green. So there is no fact of the matter about what we mean now, either. By 'fact of the matter', we must be clear that Wittgenstein is not speaking commonsensically; 'fact of the matter' is being used as certain philosophers use it, namely the Wittgenstein of the Tractatus, Russell in his logical atomism period, certainly Descartes, and anyone else who believes that there are facts which correspond to representations in a picture theoretical or referential sense. Well, what would it be like if there were such a fact that distinguished our use of 'green' from meaning grue? There would be a thought whose truth conditions were those of 'this is green', and another whose truth conditions were

²³ We always speak of a specific shade of green, blue, etc. We suppose that even grue comes in specific shades.

those of 'this is grue'. The theory under attack almost always posited the existence of two steps involved in establishing such a fact's existence. First, there is the learning of the meaning of 'green' by a pointing to a green thing, the baptism. Second, there is an ability for reidentification. Thus, one might learn 'green' by one's mother pointing to an emerald. Then later, when one sees another emerald, or the same one, one reidentifies it as being green on the basis of the original learning of the meaning of the term. Wittgenstein—and many others now, we know—attack both these steps. In particular, the reidentification step, according to Wittgenstein, involves a rule. That this has not been seen with any clarity by picture theorists, we believe, accounts for the depth of strangeness that even Kripke feels in exposing it.

Let us try to make the attack clear. The pointing metaphor—if indeed it is a metaphor—gets lots of attention in the *Investigations*. One major objection to pointing is that it is ambiguous—how, for example, does one know that mother was pointing to the color, and not the shape, or the size, etc. or, for that matter, to something grue? Well, the answer can go, one may not know what mother was pointing to, but one knows what one *thinks* she was pointing to. So, we know what we took her to mean, even if she did not mean what we took her to mean. We have our own baptism of what it means for something to be called 'green', and what that something is. What this comes to is that we know which of our thoughts are, as it were, green thoughts.

As we shall see, this seemingly inviolable truth is shown by Wittgenstein to be untenable. After all, we now seem to be in dangerous waters, namely the waters of the private language argument. We are also in Cartesian waters. The point of Descartes's answer to the demon was that there are thoughts that guarantee their truth conditions. When we for the first time perceive and think that something is green, then our thought intends the possibility that something is green. There is a truth condition that, if fulfilled, would make one's thought true. When one later see something green, one recognize it on the basis of that first baptismal event. To Descartes, some such process is the foundation of the very intelligibility of thought. Wittgenstein takes up just such a case in Section 258 of the *Investigations*:

Let us suppose the following case. I want to keep a diary about the recurrence of a certain sensation. To this end I associate it with the sign "S" and write this sign in a calendar for every day on which I have the sensation.——I will remark first of all that a definition of the sign cannot be formulated.——But still I can give myself a kind

of ostensive definition.—How? Can I point to the sensation? Not in the ordinary sense. But I speak, or write the sign down, and at the same time I concentrate my attention on the sensation—and so, as it were, point to it inwardly.—But what is this ceremony for? For that is all it seems to be! A definition surely serves to establish the meaning of a sign—Well, that is done precisely by the concentrating of my attention; for in this way I impress on myself the connexion between the sign and the sensation.—But "I impress it on myself" can only mean: this process brings it about that I remember the connexion *right* in the future. But in the present case I have no criterion of correctness. One would like to say: whatever is going to seem right to me is right. And that only means that here we can't talk about 'right'.²⁴

What Wittgenstein seems to be challenging is the use we can make of the baptism ceremony in the recognition of what we claim to be similar states. If we claim that the current emerald we see is green, we must on Wittgenstein's view justify our use of the term 'green' by providing the fact that does the justification. If we cannot provide it, then there is no fact of the matter as to whether our present identification is correct. That there is no fact of the matter is shown by two arguments: first, that a reapplication uses a rule, and the rule is open to a skeptical attack; secondly, that any thought we have which we might label a green thought is also a grue thought, with no way to tell which one is which.

The connection between the baptismal ceremony and reidentification is not as clear to us as it seems to be to Kripke. Kripke believes that the rule following argument's skepticism yields the private language argument as a corollary, and he certainly seems to identify the baptismal step as one that involves a private language. In discussing how the rule following argument is to be applied to sensations, he invokes Goodman's case of green and grue. But to what end? If the intentionalist says she can show the baptismal presentation is green by how she identifies future phenomena, then there is indeed an immediate problem. There is nothing in the case that would logically dictate whether in future she would act in a green rather than a grue way. Consider two possible rules she might adopt: 'Call anything green that is like the one I just saw', 'Call anything grue that is like the one I just saw'. Is there something more 'natural' about the former than the latter? Certainly not, from a logical point of view. So the

²⁴ Philosophical Investigations, p. 92^e.

²⁵ As in the quotation above. See Kripke, p. 20, and our fns. 27 and 36.

intentionalist cannot use a rule of reidentification to show that at the baptism she meant green rather than grue.

However, this point is independent of the point that we can't tell green from grue when we have the baptism ceremony. So even if one cannot establish the crucial fact of the matter about whether one means green rather than grue at the baptism by appealing to a reidentification rule, perhaps the baptism itself can establish this fact. In the crucial quote above from p. 20, Kripke sets up the problem, as it were, conditionally: If the intentionalist meant green by her past usage, then we get one rule; if she meant grue, we get another. But the rules contrast only if we assume for the sake of the rule following argument that we start with one or start with the other. Hence it appears that a different argument is needed to throw doubt on the baptism ceremony itself. To repeat, even if it were true that the intentionalist knew the baptismal ceremony presented her with green, and not grue, i.e., that is what she was thinking, nothing follows about any rule she will adopt for the future. This result cuts two ways, against both the intentionalist and against Kripke's interpretation of Wittgenstein. Kripke, we believe, equates the argument against reidentification of sensations with the rule following problems just exemplified.²⁶ This, we think, may be a mistake. If the baptismal stage is logically independent of the rule following later stage, then Wittgenstein cannot use this rule problem to show that right now in the baptism stage, when the intentionalist believes she identifies something green, she is not justified on the truth conditions view of meaning in saying this, rather than saying she is identifying something grue. Whether one could argue successfully, in favor of some version of Kripke's view, that there are rules involved in establishing truth conditions for baptisms, is an issue we will not address. Indeed, Wittgenstein has other arguments for the baptismal stage, of which more below.²⁷

So a large part of Wittgenstein's problem is over the criterion we use to claim that our present state is the same as our past one or,

²⁶ Kripke, pp. 83ff.

²⁷ See Kripke, pp. 19ff., p. 60, fn. 47, and most important, pp. 83ff. Kripke argues that the argument against an unambiguous interpretation of ostension is an aspect of the general one he believes Wittgenstein constructs against the picture theory's isomorphism to facts. That general argument, Kripke argues, is also exemplified in his discussion of likeness/sameness conditions. What is important for us, however, is the conclusion about ostension, about which we are no happier than Kripke, and in the same boat with respect to figuring out what can be wrong with it.

even, that the spot on the left is the same color as the one on the right. He would not accept, as he did in the *Tractatus*, that sameness is 'primary' in the sense that recognition of sameness must be presupposed in order to build a meaningful picture of the world (of which, more below). Rather, the very attribution of sameness is fraught with difficulties because, as Kripke points out, such attribution is the embodiment of a rule, and so itself is subject to the rule following argument.

Kripke rehearses a similar point from the *Investigations*. ²⁸ Suggesting that perhaps the association of an image with a word determines its meaning, he constructs a counterexample to the image's 'intended' use. If one associates, say 'cube' with an image of a cube, then if one sees a triangular prism, one does not identify it as a cube. But, says Kripke, he can imagine a method of projection of the model picture onto the triangular prism "according to which the picture does fit after all". But suppose the method of projection is part of our schema? One sees, say, a picture of two cubes connected by lines of projection. Wittgenstein says about such an example, "Can't I now imagine different applications of this schema, too?" The gist of this, we believe, is that the projection is in fact a rule—identify the object on the left the same as the one on the right, which is a cube. Kripke raises Wittgenstein's question "What tells me how I am to apply a given rule in a new case?" The answer must be something outside any images.29

This example shows clearly that the problem Wittgenstein is raising is not one of memory, as many have interpreted it to be. It is not that the past is dead and gone so that any pronouncement that the present resembles the past is arbitrary. The skeptical problem can be raised in the present tense, as it were. One part of the problem concerns identity and criteria or rules for its attribution or, in *Tractatus* terms, problems about the semantics of *universal generalizations*. Two of the major themes of the *Tractatus*, that Russell's theory of identity is confused, and that universal generalizations do not state facts apart from a conjunction of individual facts, can be seen here in a new and more powerful form. In *Tractatus* terms, universal generalizations do not have a semantics apart from a conjunction. Otherwise they cannot be applied unless there is a further rule

²⁸ Investigations, p. 55°.

²⁹ Kripke, pp. 42-3.

of application, e.g., universal instantiation in a standard, first-order logic—leading to one of Wittgenstein's skeptical claims over rules for following rules, etc.³⁰ But if rules *as we know them* involve only finite conjunctions, there will always be a new case that can be constructed which the conjunction does not cover, so that the rule cannot justify the application of, say, 'green' to this new case. These skeptical claims are implicit in the *Tractatus*, but the new treatment of identity is more radical, as we shall now show.

On Wittgenstein's Tractatus views, at least as amplified by Russell in his logical atomism papers, sameness and difference were primary sameness and difference show themselves in the signs of the language, and this syntactical point has a semantic implication. 'a has the same property as b' does not express a relation in the way that, say, 'Bob is Mary's brother' expresses a relation. If two atomic statements have a predicate sign in common, this shows that the things in question share a property. How this reidentification was made was not of concern to the atomists as logicians, but in putting forward a semantic theory for his 'ideal' language, Russell implied that reidentification was not a problem. Indeed, the reidentification of properties is essential to knowledge on the picture view. To do science we need classes. To have classes we must have properties. To have properties we must have reidentification. Sameness of property shows itself by sameness of sign. But how will it be determined which things or events get the same property signs? On the Russell view, once naming is established, the meaning of a name or of a predicate expression is something one accesses; one recognizes that something now is the same color as something one saw before; that fact is presented somehow. There is a long history of the doctrine of abstraction of properties, of conceptualism, of platonism, all of which posit the existence of an enduring entity that captures the original baptism for future use. Descartes, for example, uses the doctrine of innate ideas specifically for this purpose.³¹ There is a complex causal process that results in our sense percepts, but Descartes never doubts that innate ideas allow us to recognize percepts we have previously experienced.³² Innate ideas are not just invoked to prevent the absurdity of something coming from nothing,

³⁰ If we need a rule to interpret a rule, we are clearly off onto a regress that apparently has no end unless we take Ayer's way out, discussed presently.

³¹ See our discussion in *Descartes's Legacy*, pp. 49–53.

³² Some commentators on Descartes's skepticism take the demon problem to involve memory. If this is correct, one might claim there would be a problem about recognition of similarity. But it would not be Wittgenstein's problem.

but to guarantee recognition. Implicit in all such doctrines is that the use of the concept, of the abstract idea, of the platonic idea is immediate and direct—one just recognizes that this is green in the same way one recognizes that two spots presented at the same moment are green. The sameness is presented. Criteria are not involved.

But it is just this alleged presentation that Wittgenstein challenges. Let us repeat: this is not a memory problem as it may at first seem to be because of Kripke's examples. It is not that one's past experience is gone and so cannot stand as a comparison model for one's present identification. Goodman in fact is sensitive to an aspect of this problem in The Structure of Appearance. He claims that the matching of a past presentation with a present one takes the form of a decree. Decrees do have truth values, which are determined by their consistency with other decrees. But Wittgenstein would not be satisfied with this.33 Yes, Goodman has seen that the calling of a present experience 'green' is in a certain sense arbitrary. But he does not go far enough. For Goodman is using a term like 'green' which he is decreeing is consonant with past usage, when he could equally well have justified his decree using 'grue'. Had Goodman really seen his own grue problem correctly, as we stated previously, he would have seen that the issue is not just over which hypothesis about emeralds is the justifiable one, but—to put the point a bit more fancifully—which hypothesis is which!

In his excellent book on Wittgenstein, Ayer takes up but does not, in our view, see the power of Kripke's construal of the rule following argument, subjecting it to what he feels is a *reductio*.³⁴ But in his ensuing discussion of the private language argument, Ayer in effect says that unless there is a basic identification of sameness that needs no further criterion for checking what we claim to be the same, there can be no verification—in the philosophical sense—at all.

The crucial fact it seems to me that Wittgenstein persistently overlooks is that anyone's significant use of language must sooner or later depend on his performing what I call an act of primary recognition.... The point I am stressing is not the trivial one that the series of checks

³³ See *Structure*, pp. 97ff. Goodman is certainly not a picture theorist, but we believe he nevertheless wants to hold on to a semantics of truth conditions. We will not argue that point here, but we think that Wittgenstein sees only one alternative for a truth conditional semantics—namely the picture theory as he described it in the *Tractatus*. So once the picture theory is refuted, we must replace truth condition semantics with warranted assertability semantics.

³⁴ Ayer, pp. 76ff.

cannot continue indefinitely in practice, even if there is no limit to them in theory, but rather that unless it is brought to a close at some stage the whole series counts for nothing. Everything hangs in the air unless there is at least one item that is straightforwardly identified.³⁵

We recall a parallel, related argument given by Russell that dictionary definitions are circular, and in order to escape the circle, one must accept that there are primitive terms whose meanings are not given by other words but by some other means, e.g., what Russell called direct acquaintance. One might say that Ayer has notoriously begged the question here—it is just against such primary acts of recognition that the Wittgensteinian argument was fashioned. Wittgenstein simply does not accept the traditional way out, because it appears to him completely arbitrary and thus not based on the facts which he believes Ayer's theory inconsistently demands, and which he challenges Ayer to produce.

Let us, then, take up Ayer's primary act of recognition, what we have called the baptism. On Wittgenstein's view, the baptism is not the establishment of a fact, but rather is some sort of ceremony or, even, command! There is no fact that the baptismal 'green' names 'green' picks out. There is an echo here of the Tractatus view that to be the name of something shows itself in the occurrence of a sign in the logical language as it is constructed, and the baptism ceremony in no way can be expressed by an atomic fact in that language. But the point is more radical. The reason there is no fact about whether we mean 'grue' or 'green' when we use the term is this: the thought we bring to bear as the justification for calling a presently observed emerald green, namely the baptismal thought, is subject to skeptical doubt: the skeptic could claim that it is in fact a grue thought, and not a green thought, as it were. What is it about the possibility presented by the thought that would distinguish them, if the paradigm case is, say, an emerald? One can't define what one means in terms of truth conditions because both grue and green have the same truth conditions at the baptism! So there has to be more to meaning than mere truth conditions.³⁶ We have echoes of

³⁵ Ayer, p. 76.

³⁶ We are here constructing what we believe to be an aspect of Wittgenstein's private language argument that is, although *prima facie not* a corollary of the rule following argument, certainly inspired by it given Kripke's discussions of grue and green. If, however, one construes the assignment of truth conditions as itself the application of rules, one *might* make the rule following argument stick even here.

the *Tractatus* here. If one objects that the truth conditions for 'grue' are different than for 'green', the answer is that there is an atomic fact at the moment that is a truth maker for either 'this is green' or 'this is grue'. The emerald no more presents a green fact than a grue fact. One might say that one is concentrating on the green, but to give a truth condition for what one is concentrating on is to give a grue truth condition as well.

Such skepticism was not envisioned by Descartes because he thought thoughts simply presented themselves as to what they are about. But how to argue that grue is *not* presented when one sees the emerald? If one takes a Goodman approach, grue could be 'directly presented' just as well as green.³⁷ One could see an emerald as green or as grue. The so-called possible fact that our thought presents is anchored, as it were, by the emerald, but the emerald is *both* green and grue. If one protests that in future, the only things that will justifiably be called green are like the emerald in color, the skeptic replies that he too has a sense of color likeness: the blue sky is grue and hence the same color as the emerald. So, the appeal to a rule of sameness of color won't distinguish the original baptismal fact as a green fact rather than a grue fact.

It therefore appears that Kripke is correct—that Wittgenstein has uncovered a form of skepticism that goes beyond anything envisioned by the classical skeptics, at least if Descartes is their paradigm. Nothing in Cartesian semantics can escape the force of Wittgenstein's arguments. If the rule following argument and the private language argument cannot be defeated, a whole way of looking at the world is in jeopardy. Even so, the logic of Wittgenstein's argument has a decidedly familiar ring. In Descartes's Legacy, we discussed a problem which has played a major role in recent discussions in philosophy of mind. The inverted spectrum case, when generalized in a certain way, also cannot be handled by Descartes's theory of the intentional. Suppose that there is a cube in the physical world which causes S to have sphere percepts, whereas others have the normal, cube percepts. That is, if others could experience what S experiences, they would identify what she sees as a sphere. But S is taught the appropriate words, so converses perfectly adequately about cubes. We shall not comment here

³⁷ Goodman defends his notion of grue against attacks that it is not given, as part of his general distaste for the doctrine of the given. See *Problems*, pp. 5–23, and 402ff., in *Structure*, pp. 99ff.

on the conditions that would have to obtain for this sort of inverted spectrum case to occur or, for that matter, even the usual color case to occur, except to say they would have to—to be completely undetectable—violate all known laws of interaction between brain and mind, i.e., if there were brain state differences between S and others when perceiving the cube, this would arguably be a detectable difference, and the problem would collapse. What interests us is the semantics of the situation. On a Cartesian view, S's idea presents truth conditions to her—she knows what the world would be like if there were spheres in it. She mistakenly thinks these are the truth conditions for 'this is a cube'. Normal perceivers seem to have the right truth conditions for 'this is a cube'. But once the possibility of such deviance is raised, who can be said to have the 'right' semantics for 'this is a cube'? For all we know, everyone has a different percept, envisions a different possible world. Given this possibility, can we say that 'this is a cube' has truth conditions in the Cartesian sense? If not, then it has no meaning in the Cartesian sense. Yet, even absent meaning to our words, our ideas are still seemingly meaningful in that they intend truth conditions. But an evil demon who held sway here could give us information that is totally wrong when it comes to what the physical world is like, without affecting our behavior towards it in any way. The inverted spectrum case shows that an intentional theory cannot rule out the possibility that the world is totally different from how it appears, but its logic does not rule out each of us envisioning a possible world and its truth conditions.

There are parallels to Wittgenstein's skeptical argument. Imagine S seeing grue emeralds when everyone else sees green ones, and assume for now that t has not been reached. Goodman argues strenuously that this is at least a logical and even psychological possibility.³⁸ But again, S has learned to use 'green' about such cases, and so at least up until now has not detected any difference between her usage and that of others. Of course, just as in the generalized inverted spectrum case, the truth conditions for S's idea are different from the truth conditions for the normal perceiver's idea. And again, the specter that 'this is green' has no semantics is raised, since everyone might be envisioning different possibilities for 'this is green'. Indeed, the fact that someone else might be seeing green when looking at the same thing that S is looking at even raises, parallel to the cube/sphere

³⁸ See fn. 37.

case above, the possibility that the *judgment* she makes based on her sense presentation could be systematically incorrect. However, the spectrum case is based on the assumption that S and the normal perceiver are having different presentations, and the so called qualitative feel of those presentations is not in doubt. Wittgenstein is raising the question as to whether the presentations are distinguishable; that is, if S was having the normal presentation of a green emerald, rather than a grue presentation, what would be the difference? In the spectrum case, S judges mistakenly that she is seeing a sphere; all she has right is the correct word and the correct behavior. But Wittgenstein takes the case a step further—it is not clear what S's judgment should be on the basis of what is presented to her, because there is no fact of the matter about what is presented to her.

PART III: CONCLUSION

In Descartes Legacy, we tried to show that the demon hypothesis can be considered an attack on the semantics of our thoughts about the world—our ideas, which we think accurately represent the world, may not do so at all—e.g., we might at any moment be dreaming but believe otherwise. But there must be conditions that are met before we can be fooled—we must believe something true that is not. To believe something true is to know the truth conditions of what is believed. The issue of whether our ideas are true of the world is a further issue—dependent upon establishing that we can even intelligibly understand their truth conditions. For example, suppose S believes that there is a dog before her that is white. She knows, at least she thinks she does, the truth conditions for her belief—namely that there is a white dog before her. But if the evil demon is around, perhaps what she is 'really' thinking is that there is a black cat in Beijing or, perhaps, she is thinking nothing intelligible at all.

Is it possible that the demon could be so insidious that even our ideas are not at all what they seem; we only—in some confused way—believe we know what their truth conditions are, what the world would have to be like in order for those conditions to be instantiated? On the hypothesis that the demon is so deceiving us, we would be mistaken about what the world would be like if those representations were instantiated. We have argued that for Descartes these 'possibilities' make no sense. To be fooled, we have to know

what we believe. If we don't, then our thoughts are merely confused, and so we don't believe falsehoods. For example, in both the third and sixth Meditations Descartes's aim is to get out of the 'circle of ideas.' His arguments are meant to show that at least some of the things his ideas are about—namely, simple ideas—exist, though sometimes merely as possibilities. So, God exists because Descartes's idea of God requires God to be its cause. The idea of God has a content, and what guarantees that its content is what it appears to be is also what guarantees the existence of God. There cannot be the mere appearance of truth conditions for some ideas. Even the demon cannot make things merely appear intelligible. Descartes constructs a semantics for certain ideas (simple ones) that guarantee they represent something, and compounds of these simples represent correspondingly.

Descartes is not here merely stamping his foot and saying that the demon cannot do his semantic damage. Rather he invokes the old and powerful principle that something cannot come from nothing, and the corollary that the cause of an idea must have as much formal reality as the idea has objective reality. To say an idea has objective reality is to say it presents its truth conditions to us. We know what the world would be like if our belief is true. But such a presentation must have a cause, and Descartes puts limits on this cause. Not a Humean, Descartes does not believe that just anything can cause anything. If he did, he might indeed worry that the evil demon could cause our ideas such that we believe we are thinking of a dog when we are thinking of a cat.

But, one says, does this make any sense? How can our idea seem to be about something it is not about? Indeed, Descartes's invocation of the principle that the cause of an idea must have at least as much formal reality as the idea has objective reality, i.e., that the idea as effect must have an appropriate cause, can be seen as an attempt to show the demon cannot do this sort of work. Descartes treats this claim about objective reality as a principle of intelligibility of ideas. To put the point in traditional ontological terms, there must be a ground for the intelligibility of our ideas, and this ground is external to the thinker. Such, we think, has been a presupposition of the deepest forms of skepticism—until Wittgenstein.

Wittgenstein's argument cuts against this entire way of looking at the world. If meaning is measured by truth conditions then, yes, we might be thinking of a dog when we think we are thinking of a cat. We might be thinking of grue when we believe we are thinking of green. To escape these "incredible" conclusions, as Kripke calls them, one must either find some refutation of Wittgenstein's views, or enter into an entirely new way of looking at meaning and with it, we believe, metaphysics and ontology. Although we are unwilling at this point to so enter, we do not pretend that we have found a way out of Wittgenstein's evil demon hypothesis.³⁹

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³⁹ We are not satisfied with any of the refutations we have read. We are writing a book on the subject of Russell and Wittgenstein's early views and will certainly take the issues up again in detail.

THE ABOUTNESS OF THOUGHT

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It was Brentano who introduced the term 'intentionality' into recent philosophy to mark the characteristic aboutness that distinguishes our mental acts from other entities in the world. This use was not wholly original with Brentano, however. He had derived the term from mediaeval epistemology and philosophy of mind, which took over essentially Aristotelian ideas.

According to the standard Aristotelian account of knowing, the essence or form of the substance known was literally in the mind of the knower: like knows like, and the mind knows its object through becoming identical with that object. The form or essence of the thing known is in the mind as properties are in the mind; in Cartesian terms: this is the form as idea, this is its material reality. But it is also the essence of the thing known as that essence in the substance known; in Cartesian terms, this is the objective reality of the idea. By virtue of the idea in the mind having this objective reality, the idea is about or represents or, in Brentano's terminology, "intends" the object which is before the mind.2

There were problems, however. First, how could the idea come to be in the mind? Aristotle gave the answer that the mind went through a process of abstraction the product of which was the presence of the form or essence as a property of the mind. But Descartes argued that the form of wax involved an infinite number of variations in shape as the wax melted and flowed from one shape to another, whereas what is presented in sense experience is only finite. We could not, therefore, obtain the idea of the form of wax by abstraction from sensible impressions. He concluded that our ideas of forms or essences were all innate. But this was then subject to Locke's sceptical critique of innate ideas.

¹ Cf. the epistemological principles J, K, and L laid out by R. A. Watson, The Breakdown of Cartesian Metaphysics (Atlantic Highlands, NJ: Humanities Press, 1987), pp. 51-52.

² Cf. Watson's principle M, p. 52.

But second, how could a form or essence be in the mind, as a property of the mind, when it is precisely that feature of the substance of which it is the form that accounts for the properties of that substance: if the form of a oak tree causes that substance to grow like an oak then why does the same form in the mind not cause the mind to become an oak tree?

Ideas as forms in the mind did solve one problem. When we perceive an object, we are conscious in experience of a sense impression. But that is a sense impression of only part of the object perceived: not all of the object as a thing located in space and enduring through time is given in sense experience, there is the future, the past, the other side, the inside, and what it would be like if certain other events were to occur. Present to consciousness is the sense impression but also the judgment that locates what is sensed, the impression, as of an object in space which causes the presence of the consciousness of a sensible object. The perceptual judgment consists of an essence or Form as a property of the mind; it as it were connects the mind not only to the sense impression but also to the larger object of which the sensible object is a part and which is the cause of our awareness of that sensible impression. It intends the whole of the perceptual object, not just the part that is given in sensory awareness. As H. H. Price once put it, there is on the one hand "primary recognition" of the sensible object as qualified in certain ways and as related to other sensible objects in certain ways, and, on the other hand, "secondary recognition" which is a recognition of an object that has qualities not given in sense, not present to consciousness.3

That there is something present in consciousness that as it were connects the mind to the perceptual object is clear. The tree that I perceive is itself not wholly present to my current conscious state; as a tree it has a past and a future which by the nature of the case are not part of my conscious state that is here present now. Indeed, if I am misperceiving, then there is no tree there—think of Macbeth's dagger. But, even though the perceptual object is not wholly there or even if it is not there at all, I am nonetheless wholly certain that what is perceived is a tree: I am certain that what is perceived is a tree and not, for example, a fence post. What enables me to say that "That is a tree" and to say with certainty that "I perceive that

³ H. H. Price, *Thinking and Experience* (Cambridge, Mass.: Harvard University Press, 1953), pp. 44–52.

that is a tree" is the presence in consciousness of a property, a property which intends the tree as an object that causes my mental state to be one which is properly expressed by saying "That is a tree" and properly described with certainty by saying "I am perceiving that that is a tree." Moreover, I tend to respond behaviourally to a tree and not to a shrub or a fence post, and even if the tree is not there, even if I am misperceiving, I am still disposed to respond as if there were a tree present: it is a dagger that concerns Macbeth. There is a cause present in consciousness that is connected to that disposition to behave; this present cause is the perceiving which has the property of being a perceiving of a tree.⁵

Finally, as Price emphasizes, the capacity for secondary recognition is acquired; it is something learned. And like induction, it involves a judgement that goes beyond what is sensibly present. But unlike induction, it does not involve, so far as consciousness is concerned, an inference. In that sense, it is an immediate judgment of no internal complexity. To be sure, the object of the judgement is complex; but the judgement itself is an immediate unity and whole. It is this judgment as a given unity or whole that disposes me to behave in ways appropriate to the object perceived, the object of the judgement. This judgement, the cause present in consciousness that disposes one to behave in certain ways rather than others, disposes one in particular to express one's judgment by uttering or asserting a sentence describing the complex state of affairs perceived.

The Aristotelians captured these points. On the one hand, there is a property present in the mind that, on the other hand, intends the structure of the perceptual object. Moreover, the Form or essence in the mind, like the Form or essence in the thing perceived, is a simple: to be sure, the characteristics of the substance that we observe in sense experience are complex, but the Form or essence which accounts for their presence is simple and unanalyzable. Nonetheless, there remain the problems with the notion of a Form or essence and of such a Form or essence coming to exist as a property of the mind. These problems exclude the Aristotelian solution, but there remains the issue of how it comes to be that the property present

⁴ Cf. L. Addis, *Natural Signs: A Theory of Intentionality* (Philadelphia: Temple University Press, 1989), pp. 51ff.

⁵ Ibid., pp. 48ff. ⁶ Cf. F. Wilson, The Logic and Methodology of Science in Early Modern Thought: Seven Studies (Toronto: University of Toronto Press, 1999), especially Study One.

in the mind that represents the structure of the perceptual object actually does represent that structure of parts that are not presented. How does one analyze intentionality?

There has been some argument about this. The continental philosophers so called have said much about intentionality, but in fact have done little to address the philosophical issues surrounding this connection. One finds greater sensitivity to these issues among analytic philosophers so called, or at least among some of them.

Russell, for one, attempted to deal with the issues. He proposed to analyze intentionality in terms of a descriptive relation, in a way similar to the way in which he had analyzed "x kicks y". This seems to make great deal of sense, initially: after all, grammatically the phrases 'intends' or 'is about' function as relational predicates, connecting the mental act, say of perceiving, to the state of affairs that it intends or is about—thus, "I perceive that this is a tree" grammatically relates the perceiving on the one hand, the conscious state, with, on the other hand, the state of affairs, represented by 'This is a tree', which that perceiving intends or is about.

There is a problem. If 'x kicks y' is true then both x and y must exist: one cannot be a kicker unless there is a kickee. That means that if intentionality is to be analyzed as a relation, then both relata, the perceiving, in our example, and the state of affairs intended, must both exist. Russell argued that this is no problem for sensible acquaintance, since that is infallible. Or at least, Russell argues that sensible acquaintance, though not perceiving, is quite certain, and clearly supposes that such certainty can be accounted for provided that one makes acquaintance a relation like kicking that guarantees the existence of its object.

But there is a problem. Though sensible acquaintance might well be certain and a candidate for infallible judgment, the same is not true of either perceiving or believing. (The latter is the example that Russell discusses, but he makes it clear that what he says applies to the former also.) These sorts of mental act are not infallible; to the contrary, they are quite often false. But if false, then their objects do not exist. In that case the simple relational account that Russell gave to sensible acquaintance cannot apply to believing or perceiving. Russell argues his case with respect to the example of Othello

⁷ B. Russell, *Problems of Philosophy* (Oxford: Oxford University Press, 1912), Ch. xii.

believing—falsely—that Desdemona loves Cassio. Since it is false that Desdemona loves Cassio one cannot make believing a relation between Othello and this state of affairs. Russell suggests that though that state of affairs does not exist, its constituents, namely, Desdemona, Cassio and loves, all exist. Believing then is, he proposes, a multi-term relation which relates Othello to Desdemona, Cassio and loves, and that this belief is true (false) just in case that the state of affairs the Desdemona loves Cassio exists (does not exist).

This avoids the problem of false beliefs and perceivings only to raise others. In the first place, it does not distinguish between Othello believing that Desdemona loves Cassio and Othello believing that Cassio loves Desdemona. Secondly, as Wittgenstein argued,8 it does not make it impossible to have nonsensical thoughts: from a knowledge of the fact that Othello is related to Desdemona, Cassio and loves, how can one from that information alone guarantee that he is not thinking the nonsense thought that Cassio Desdemonas loves? Thirdly, Russell's analysis treats two different forms of the same thing—sensible acquaintance, on the one hand, and, on the other, believing and perceiving are all forms of consciousness—in two different ways: the former is a simple two-term relation, that latter is multi-term and in fact could become very complex indeed if there are more than a few entities in the state of affairs believed or perceived. Fourthly, this analysis makes the belief true or false depending upon whether the state of affairs that Desdemona loves Cassio exists or does not exist. Implicitly, therefore, Russell is still smuggling in that state of affairs as the object of belief, that which the belief is really about, re-introducing, albeit covertly, all the problems of how the existing state of believing can be related to a state of affairs that does not exist.

Wittgenstein therefore attempted another analysis. He proposed "...that 'A believes p', 'A has the thought p', and 'A says p' are of the form "p" says p'; and this does not involve a correlation of a fact with an object, but rather the correlation of facts by means of the correlation of objects." (*Tractatus*, 5.542) This makes thought

⁸ L. Wittgenstein, *Tractatus Logico-Philosophicus*, trans. D. Pears and B. F. McGuiness (London: Routledge, 1961): "The correct explanation of the form of the proposition, 'A makes the judgement p', must show that it is impossible for a judgement to be a piece of nonsense. (Russell's theory does not satisfy this requirement.)" (*Tractatus*, 5.5422)

a special case of language: the meaning of thoughts is to be analyzed on the model of the meaning of language. As Wittgenstein would have it, a thought is an image or set of images that functions as a sentence functions, playing the role in inner language that the corresponding sentence plays in overt speech. Any sentence becomes a meaningful proposition, the Tractatus argues, when it pictures a state of affairs. The state of affairs to which it is thus coordinated is its meaning or sense (Sinn). The sentence becomes meaningful by virtue of sharing a logical form with the state of affairs pictured. This shared logical form establishes an isomorphism between the picturing sentence of thought and the pictured state of affairs. But the isomorphism by itself does not establish that the sentence or thought is about the state of affairs pictured; for, given that a relation of isomorphism is symmetric, that would imply that the thought or sentence is itself pictured by the state of affairs, that the state of affairs as much means the sentence as the sentence means the state of affairs. What makes the sentence of thought about the state of affairs is the fact that the names that, in concatenation, make up the sentence designate the objects in the state of affairs rather than conversely. By virtue of these relations an object becomes the meaning in the sense of referent (Bedeutung) of a word. In Wittgenstein's metaphor, these relations of designation or reference are as it were "antennae" that reach out from the words in the thought or sentence to the objects of the state of affairs pictured: "The pictorial relationship consists of the correlation of the picture's elements with things./These correlations are, as it were, the feelers of the picture's elements, with which the picture touches reality." (Tractatus, 2.1514, 2.1515).

This does avoid the problems that are raised by Russell's account of belief. But it has its own difficulties. The meaning of a term in its most general sense is given by the role that it plays in language. This role consists of regularities or patterns that describe the patterns of use or dispositions to use of the word. These regularities include the syntactical regularities (word-word connections) and semantical regularities (world-word connections). It also includes pragmatic aspects of language (word-world connections), but Wittgenstein ignores these in the *Tractatus*; as the "Slab!" example at the beginning of the *Philosophical Investigations*9 makes clear, he was later to discover these

⁹ L. Wittgenstein, *Philosophical Investigations*, trans. G. E. M. Anscombe (Englewood Cliffs, NJ: Prentice Hall, 1958).

aspects of language and of linguistic meaning. Now, in any use of a word, many of the dispositions that form part of its meaning are not exercised. We can know that a disposition is present only if we infer it or we experience its exercise. In the case of thoughts we do not infer—our knowledge of what we are thinking about is in this sense immediate—, and many of the dispositions determining the meaning of the words and sentence are not exercised at that moment. But we do know what we mean: our sense of knowing what our thought is about is immediate and patent. Since meaning is as it were wholly present, it follows that it cannot be simply a sentence or words as images that carry the meaning; there must be some non-image present in consciousness by virtue of which we know what our thought is about. Wittgenstein saw this point clearly in the *Philosophical Investigations*:

Experiencing a meaning and experiencing a mental image. "In both cases," we should like to say, "we are *experiencing* something, only something different. A different content is proffered—is present—in consciousness."—What is the content of the experience of imagining? The answer is a picture or a description. And what is the content of the experience of meaning? I don't know what I am supposed to say to this. . . . ¹⁰

What that meaning is is that it is not an image: it is an imageless thought, where the content is expressed by a sentence but not described by sentence. Wittgenstein is here discovering, as it were, what had earlier been discovered by the Wurzburg psychologists of the school of O. Külpe.¹¹

It was G. Bergmann who took up both the point of view of the *Tractatus* and that of the Wurzburg psychologists. He argued that this problem confronting the analysis of the *Tractatus* could be solved if one took that which carried the meaning to be an imageless simple character, exemplified by mental acts, including mental acts of thinking, believing, perceiving, approving, wishing, and so on. This

¹⁰ L. Wittgenstein, *Philosophical Investigations*, pp. 175-76.

¹¹ Cf. G. Humphrey, *Thinking* (London: Methuen, 1951), Ch. 1, for the story of the Wurzburg school and the entrance of imageless thoughts into introspective psychology. The work of the Wurzburgers is located in the history of psychology in F. Wilson, *Psychological Analysis and the Philosophy of John Stuart Mill* (Toronto: University of Toronto Press, 1990), Ch. viii.

J. N. Findlay has correctly pointed out that one of Wittgenstein's main discoveries that led from the account of mind in the *Tractatus* to the philosophy of the *Philosophical Investigations* was the discovery of imageless thoughts; see his "Wittgenstein's Philosophical Investigations," *Revue Internationale de Philosophie*, 7 (1953), pp. 201-216.

simple character he referred to as a proposition or propositional character. The relation between the thought or belief and that state of affairs which is its object he took to be a logical relation, by which he then meant a linguistic or syntactical relation. He takes the sentence that describes the state of affairs which the thought is about and refers to it as the "text" of the thought. He then forms what he refers to as a predicate by putting the text in quotes; this predicate designates, he has it, a simple character. This character is a character or property of thoughts, mental acts, including beliefs and perceivings—Bergmann refers to these as the different species of mental act; but all species have in common that the acts they characterize are also characterized by a propositional character, where the latter is that character by virtue of which the thought intends the state of affairs described by its text. It is that character present in consciousness of one who knows the meaning of the sentence that is the text, and absent from the mind of one who hears it uttered but does not know its meaning. By virtue of this character—this propositional character—being present in consciousness, we know what state of affairs it is that the mental act is about or intends. Bergmann represents this connection by the sentence

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where "M" means "means". This is supposed to be true by virtue of its syntax—it is true if and only if the 'p' after the 'M' is the same as the 'p' in parentheses—, and it is therefore supposed to be analytically true.¹²

But on this view the connection between the propositional character and the state of affairs that it means or presents is merely linguistic. This would make the connection one that holds by virtue of the conventions that govern the use of language. But the connection is that which holds between the propositional character and the state of affairs which the mental act, by virtue of that character, intends. Conventions, however, are contingent; they could be other than they are. On this view, just as 'bachelor' could mean 'unmarried budgeri-

¹² Cf. G. Bergmann, "Intentionality," in his *Meaning and Existence* (Madison, Wisc.: University of Wisconsin Press, 1959). See also "Body, Mind and Acts," and "Logical Positivism, Language and the Reconstruction of Metaphysics," both in his *The Metaphysics of Logical Positivism* (New York: Longmans, 1954).

For discussion of Bergmann's views and his philosophical development, see H. Hochberg, *The Positivist and the Ontologist: Bergmann, Carnap and Logical Positivism* (Amsterdam: Rodopi, 2001).

gar', so the propositional character designated by 'rthis is red' could be used to mean what is now meant by 'rthis is square'. That is, it could mean ("M") what is now represented by the sentence 'this is square'. Of course, though it would be the same simple character, it would in such circumstances be designated by 'rthis is square' rather than the way it is now designated, but that is no problem. The problem is that it would seem that we could change the intentional object of our thoughts simply by changing the conventions of our language. And that does not seem plausible: one can easily see that one can change the conventions for the use of 'bachelor' or for 'red' but it is quite another thing to suppose that simply by deciding to use words differently we can change the objects that our thoughts present to us.

Bergmann later changed his account of "M". On his later view, it is not merely linguistic, but represents an intrinsic feature of propositional characters, and as such has ontological status.¹³

Searle has later taken up Bergmann's point and offered a similar account of mental acts. He offers the same linguistic representation of mental acts. As he puts it, "A belief is intrinsically a representation in this sense: it simply consists in an Intentional content and a psychological mode."14 Here the mode of the psychological state whether it is a believing, or a willing or whatever—is what Bergmann calls the species. He considers John's belief that King Arthur slew Sir Lancelot, and argues that the statement that John believes that King Arthur slew Sir Lancelot is one whose "... truth requires only that John has a belief and that the words following 'believes' [what Bergmann calls the text] accurately express the representative content of his belief [what Bergmann calls the propositional character].... in reporting his belief I present its content without committing myself to its truth conditions."15 As for Bergmann on his later view, so for Searle, this intentionality of mental states is an intrinsic feature: "Beliefs, fears, hopes, and desires... are intrinsically Intentional."16 Searle differs from Bergmann only in making the character denoted by

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¹³ G. Bergmann, "Acts.", in his *Logic and Reality* (Madison, Wisc.: University of Wisconsin Press, 1964).

J. Searle, *Intentionality* (Cambridge: Cambridge University Press, 1983), p. 22.
 For discussion of Searle, see H. Hochberg, *The Positivist and the Ontologist*, pp. 32ff.
 Ibid., p. 23.

¹⁶ *Ibid.*, p. 27.

or by the sentence in the that-clause, a characteristic of brain states rather than the specifically mental, and non-physical, particulars that Bergmann regards as individuating mental acts. Mental states, Searle says, are "realized in the structure of the brain."¹⁷

There is a problem, however, one which Bergmann recognizes but which Searle simply ignores. It is this. Once one gives "M" ontological status as an intrinsic feature of propositional characters, then one must ipso facto give ontological status to the propositional character, which is no problem, and to the state of affairs meant, which is a problem since when the belief is not true that state of affairs does not exist. Bergmann accepts the point and is prepared to grant ontological status to states of affairs that are merely possible but not actual.¹⁸ This solves the problem, but only at the cost of introducing as an ontological category, as existents, things that do not exist. But as one of the central principles of Spock's metaphysics maintains, "Nothing unreal exists"; or a Russell insisted, an ontologist must have a robust sense of reality, at least a sense of reality sufficiently robust that the unreal is not made somehow real. Bergmann, in order to solve one problem, gives up this robust sense of reality; as for Searle, we do not know how robust is his sense of reality because he ignores the issue.

There is another problem which neither Bergmann nor Searle addresses. That is the fact that in granting status to "M" one is creating an absolutely unique ontological category. That is in effect to give up any attempt to *explain* the intentionality of thought. Richard Watson has put the point nicely, when he states that

What is required to support a way of ideas is an ontological model that shows how ideas provide knowledge of things. To be explanatory, the model cannot consist merely of a set of entities whose ad hoc nature it is to do what is required, entities that are related by relations that are named but not analyzed.¹⁹

What Watson goes on to show is that most recent attempts to provide an analysis of "M", one that in his sense is explanatory, do so in terms of a relation of isomorphism. He traces this notion from D

¹⁷ Ibid., p. 265; his emphasis.

¹⁸ Cf. G. Bergmann, "Notes on the Ontology of Minds," in P. French, et al., The Foundations of Analytic Philosophy, Midwest Studies in Philosophy, vol. 6 (Minneapolis: University of Minnesota Press, 1981), pp. 189–213.

¹⁹ R. A. Watson, Representational Ideas: From Plato to Patricia Churchland (Dordrecht, The Netherlands: Kluwer, 1995), p. 17.

to C—Descartes to Churchland. The difficulty is that this proposal runs into the difficulty that Wittgenstein's proposal that all thought is to be analyzed in the way that one in general analyzes "'p' says p". We thus seem to be caught in a dilemma. Either we provide an analysis of "M" in terms of isomorphism, in which case the result is inadequate to the phenomenology of mind, or we take "M" to be a primitive term, in which case we stuck with something that remains an ontological mystery together with unacceptable unreal but existent states of affairs.

I do think that Watson is on the correct track, however. There is a point to making isomorphism central to the analysis of "M", intentionality, that is, using the conventions of language including what Wittgestein referred to as "antennae", designation or referring relations, to explain aboutness. After all, it does work reasonably well for the aboutness of language. The problem is that the thoughts language as "text" express cannot, on phenomenological grounds, be construed as images or tokens of words: those thoughts must be construed as Bergmannn construes them, as simple unified wholes.

Now, what made us conclude that the characters that carry the meaning in consciousness are simple unified wholes was the fact that when they are in consciousness we know, immediately and without inference, the texts the utterance of which would express those thoughts. But what is it to "know" in this context? It means to be present in consciousness. Also it does not mean to "judge" that the propositional character has the text it has. Nor is the description of this character something for which we search and then discover: it is just there, so to speak, as is the "knowledge" that we have of its nature. All that it seems to mean, besides the presence of the character in consciousness, is that we are disposed, directly and without inference, to express the thought by uttering its text as a meaningful expression representing a state of affairs. This is a causal relation: the propositional character functions as the ground in consciousness of the disposition or rather set of dispositions that constitute the meaning of the text. And to say that John knows directly when he believes or perceives that p that that thought is the thought that p is simply to say that that is the thought the presence of which disposes him to utter the text 'p', to make the assertion that p.20 And

²⁰ This clearly presupposes some sort of psychophysical parallelism, and therefore the possibility of a purely behaviouristic reconstruction of human behaviour,

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the thought that p is about p precisely because it is the thought that disposes one, directly and without inference, to make the assertion that p.²¹

If this is correct, then there is nothing mysterious about intentionality, about the aboutness of thought. We do not need to make a special ontological category for it, transforming it into a special relation of a sort of which there are no other examples.²² There is no need to introduce as special objects of false thoughts states of affairs that do not exist but have some sort of wispy reality. We have explained the aboutness of thought in terms of the aboutness of language, as Watson suggested we must do if we are to provide an ontological analysis that explains how such aboutness works, but have done so while retaining the thought as a simple character grounding our knowledge of the state of affairs the thought it about.

The objection to thus attempting to understanding the intentionality of thought in terms of the aboutness of language is that the intentionality of language presupposes the intentionality of thought. Thus, Searle, for one, speaks of the "pervasive and fundamental confusion" that "we can analyze the character of Intentionality solely by analyzing the logical peculiarities of reports of Intentional states."23 As Searle sees it, words are not intrinsically intentional, unlike thoughts. Their meaning, the states of affairs that they represent, or, as Searle speaks, their conditions of satisfaction, is something imposed upon them. A string of sounds or marks as it occurs in a utterance act acquires conditions of satisfaction through an intentional act of the speaker: "the utterance act is performed with the intention that the utterance itself has conditions of satisfaction."24 Thus, the correlations which connect words to objects concatenated in states of affairs are dependent upon the intentions of the speaker to endow those words with those referents, where these intentions are the intentions

²¹ For further discussion, see F. Wilson, "Effability, Ontology and Method," *Philosophy Research Archives*, 9 (1983), pp. 419–470.

²³ J. Searle, *Intentionality*, p. 180.

including verbal behaviour. But mind remains mind, and is there as part of the world as we experience it.

For a discussion of parallelism, see F. Wilson, *Psychological Analysis and the Philosophy of John Stuart Mill* (Toronto: University of Toronto Press, 1990).

Mind of course is itself unique, but on the present analysis the category of thought belongs to the ontological kind of property; thoughts are unique in so far as they are all thoughts, just as colours are unique in so far as they are all colours.

²⁴ *Ibid.*, p. 167.

in the sense of volitions that cause the speaker to make the utterance and are themselves intentional states, and where the latter is Brentano's sense of 'intentional'.

But Wittgestein argued effectively against this viewpoint. As he put it, considering the correlation of names to things named, "... we may indeed fancy naming to be some remarkable act of mind, as it were a baptism of an object. And we can also say the words 'this' to the object, as it were address the object as 'this'—a queer use of this word, which doubtless only occurs in doing philosophy." (Philosophical Investigations, ¶ 38) In this way "Naming appears as a queer connexion of a word with an object." (Ibid.; his emphasis) The namenamed correlation is a world-word connection. Searle's suggestion is that an act of naming creates and establishes the correlation. Wittgenstein's point is that baptism is itself a rite or ritual, thoroughly convention-laden, and so is ordinary naming. It cannot therefore be the source of the conventions that define language. Wittgenstein's argument here is parallel to Hume's argument that promising or entering into a contract cannot be the source of the property and exchange conventions that define civil society because promising can create social conventions only by virtue of the previously established conventions which define that practice.²⁵

Addis has argued in a way that is similar to Searle:

... there cannot be conventional representation unless there is also, at some level, unconventional or natural representation; for deciding or coming to agree that one entity—the word 'red', for example—shall represent another—the property of *being-red*—presupposes that one is already able to represent each, not of course by words (which form of representation would be circular) but, ultimately, in some non-linguistic way that is non-conventional.²⁶

Now, it is true that one cannot agree with others to establish the correlation recorded in the norm

(n) 'red' means red

unless each of the group is able to attend to both the marks represented by "'red'" and the colour red, and such attention is a case of mental

²⁵ For Hume's philosophy on this point, see F. Wilson, "Árdal's Contribution to Philosophy," in Páll Árdal, *Passions, Promises and Punishment* (University of Iceland Press: Reykjavik, 1998), pp. 7–40.

²⁶ L. Addis, Natural Signs, p. 57.

acts being about or intending those things. The establishing by agreement of the rule (n) to establish a correlation of marks (or sound) and the colour red thus cannot be the sort of process that is used to establish all correlations of marks and objects. In other words, agreeing to establish the practice governed by the norm (n) itself presupposes conventions: here is simply another case of the practice of naming, and this practice, just like baptising, involves prior conventions, and therefore cannot be the basis for establishing all conventions of naming. The original conventions must be established by some other means. For Addis, such conventions presuppose non-conventional aboutness, established by an ontologically grounded "M".

But Addis' conclusion does not follow. All that follows is that the original conventions cannot be established by some conventional practise. Contrary to Addis, such a process does not need to involve non-conventional aboutness. All that one needs is that there be a regularity established between the mark or sound and the colour. Such a correlation could be established by simple learning or by reinforcement. Such learning presupposes that it is possible to discriminate both the mark or sound, on the one hand, and the colour, on the other. But the presence of the capacity to discriminate does not require that one have intentional conscious states. Addis and Searle are wrong, then, in their claim that conventional aboutness presupposes non-conventional aboutness.²⁷ It would seem, then, that after all intentionality can be analyzed as Watson has proposed in terms of isomorphism, and specifically, as Wittgenstein suggested in the Tractatus, in terms of an isomorphism constituted by the conventionally established correlations by which language can picture or represent states of affairs in the world.

²⁷ For more on this point in a slightly different context, see F. Wilson, Critical Review of R. Grossmann, *The Categorial Structure of the World, Canadian Journal of Philosophy*, 16 (1986).

A PHILOSOPHER AT LARGE

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Red Watson is nothing if not a contrarian and we are the richer for it. At a time when analytic philosophy was at its hegemonic zenith and historical interests were their most marginal. Watson made the study of Descartes and Cartesianism his life work. When historians later regained lost ground and challenged the doctrinal appropriation of historical figures by their analytic colleagues, Watson defended the philosophical significance and historical interest of what he calls shadow history in philosophy: systematic misrepresentations of antecedent thinkers and theories that deeply influence emerging philosophies, that sometimes catalyze new departures, that are themselves, he insists, as much a part of the history of philosophy as the real theories and debates they bowdlerize (Watson 1993). When attention turned to the wider intellectual and social contexts in which historical figures worked—in an effort to understand them more fully, in their own terms—Watson devoted himself to years of painstaking research on a not-so-intellectual biography of Descartes that the New Yorker describes as a "willfully eccentric book . . . as infuriating as it is entertaining" (2002), a review in which Watson delights. So perhaps it is not surprising that throughout his long career, in a period when specialization has overwhelmed (even) philosophy, Watson has refused to be confined to any one field, much less any one subfield. Rather than contrarian, perhaps I should say he is a man of many parts.

Philosophers who know Watson as an iconoclastic historian of early modern rationalism may not know that he has also been an outspoken advocate for science in the social sciences. He has focused most intently on archaeology where his wife, Patty Jo Watson, played a pivotal role in articulating the philosophical platform for the New Archaeology, a self-consciously scientific program that became a dominant force in American archaeology 1970s. In these contexts Watson, the Descartes scholar, is a passionate positivist who has never weakened in his conviction that science is a clearly distinct and unified enterprise, characterized by its commitment to a quest for universal

laws—construed as "generalizations based on experience" (Watson and Watson 1969: 6)—that has been successfully pursued, since at least the seventeenth century (1990: 5, 1992a: 260) if not "throughout the span of human existence" (1992a: 264), by means of a method of trial and error: a "mitigated (non-dogmatic, non-extreme) skeptical method of hypothesis testing" (1990: 18) whose fundamental logic is captured by "the general hypothetico-deductive method—surmise, infer, test" (1992a: 262).

When Watson makes the case against nav-savers who insist that disciplines like history and anthropology cannot be expected to yield laws, his arguments are pure Mill. He doesn't invoke tideology, but he adopts a strategy of persuasion to a science of social phenomena that closely parallels the argument Mill develops in the initial sections of his discussion of "The Moral Sciences," in A System of Logic (1893: 575-578). In his co-authored prolegomena for human ecology, he and Patty Jo Watson argue that appearances of non-lawlikeness in human, social phenomena more plausibly reflect our limitations rather than anything intrinsic to these subjects that sets them apart from the natural world; "it is simply that the spatial and temporal extension, rarity of occurrence, and great complexity of the objects of history and anthropology are such that human beings cannot easily derive laws from them" (Watson and Watson 1969: 154; see also Watson 1976: 61). Having opened this space of possibility, Watson and Watson insist that unless we embrace the conviction that there are laws to be discerned in human, historical affairs, we foreclose the possibility of ever doing social science—given that science just is "the search . . . for universal laws" (Watson and Watson 1969: 159). Sometimes they present this naturalist thesis as a self-evident truth: "since man is part of nature, he can be studied scientifically and natural laws can be derived concerning his behavior, just as is the case for any other natural object" (Watson and Watson 1969: 3). But on other occasions they adopt a more consistently empiricist tone and treat it as a working hypothesis; there is enough supporting evidence to warrant accepting the presuppositions of naturalism tentatively

¹ Elsewhere: "The difficulty in formulating exceptionless lawlike generalizations about the relations between the physical environment and man does not stem from the lack of uniformities so much as from man's inability to comprehend the many factors involved. If we are to have a scientific understanding of man, however, we must continue to seek these uniformities and attempt to formulate lawlike generalizations about them" (Watson and Watson 1969: 161).

(1969: 160; see also Watson as cited below, 1991a: 280), as a necessary condition for anthropological science (conceived in positivist terms), with the proviso that hypotheses about particular kinds of law-like regularity be held accountable to accumulating evidence as inquiry proceeds.

Unlike Mill, however, Watson envisions the prospective science that this naturalism will support in explicitly reductive terms and here his arguments evoke the mid-20th century logical empiricism of Oppenheim and Putnam, in "The Unity of Science as a Working Hypothesis" (1958). The working hypothesis Watson embraces is one that posits an "ascending order of sciences... based on the degree of complexity of the entities and events being investigated," the laws of each depending upon and ultimately reducing to those of successively more basic sciences (1976: 60). At the top of the hierarchy is archaeology, the one discipline that purports to study the full sweep of human (pre)history: "the complexity of thinking human beings organized in societies evolving through time is the most complex object of study in the known universe" (1976: 60). Whatever the challenges posed by this subject domain, Watson is resolute in his conviction that it can profitably be understood not just in scientific terms, through a search for projectable regularities wherever they occur, but in bio-physical terms; "it is our thesis that man is . . . an organic part [of nature] and that . . . because of his biological nature, the scientific understanding of man must be grounded in biological terms" (Watson and Watson 1969: 146; see also Watson 1972: 212-214; 1976: 61). Watson is scathing in his condemnation of any appeals to emergent phenomena and would presumably reject the free-standing laws posited by classical positivists—of psychology and character (Mill), of social dynamics and social statics (Comte)—as decisively as he does appeals to the superorganic. Those who stray down theoretical blind alleys such as these have foresaken science; they indulge in theology and mysticism (Watson and Watson 1969: 147, 160) or worse, metaphysics (Watson 1990: 18-22).

In Man and Nature, Watson and Watson elaborate this theoretical framework in terms of a series of "quasi-axiomatic" models (1969: 142). These are intended to capture the basic principles governing human life at eight different levels of complexity, ranging from protohumans and "elemental man" through various hunter-gatherer and agrarian forms, to "industrial man" and "atomic man"; each represents a more highly evolved form of life marked by improved control over the bio-physical environment. This is a robustly ecological

and neo-evolutionary theory that Watson and Watson propose as the framework for anthropological research. "All knowledge depends on categorization," they say at the outset (1969: 3; see also Watson 1973); these models offer a broad classification of cultural systems based on prospective explanatory laws of survival and adaptation that they hope will be tested empirically. The stakes are high. Their central conclusion is that "man is part of the ecological community of the earth and can survive as a species only if he does not disrupt the ecological balance of the earth" (1969: 161)—a putative law that we disregard at our peril, and to which we can respond effectively only if we understand the evolutionary processes and ecological constraints that put us in our current precarious position.

When Watson turned to the specifics of a meta-analysis of archaeology in the early 1970s, his account of the goals and practice of scientific archaeology shadowed Hempel, the logical empiricist who most deeply influenced advocates of the New Archaeology. Here he was concerned to articulate the philosophical underpinnings of a research program that was already taking shape in North American archaeology at a pivotal moment—roughly 1962 through the late 1970s—when the field was showing what he describes as evidence of having "attained scientific consciousness" (1972: 210). Watson endorsed the arguments then circulating within archaeology to the effect that, if archaeology was to be a science, its goal must be law-governed explanation; archaeologists must commit themselves to the search for laws of human behavior at various scales and levels of abstraction, with the ultimate aim of establishing an integrated theory of longterm, large-scale cultural process (1976: 61, 64-65).² And he agreed that, to achieve these ends, archaeologists must make sophisticated use of the archaeological record as an empirical basis for testing prospective laws, in conformity with the Hempelian logic of hypotheticodeductive confirmation. In the hands of the New Archaeologistsoriginally and most influentially, Lewis Binford³—this Hempelian account was championed as a deductivist model for practice and sharply contrasted to traditional practice which they characterized

² The New Archaeology was also known as processual archaeology, given this demand for an explanatory understanding of cultural process that goes beyond reconstructive, descriptive culture history.

³ These arguments appear in a series of "fighting" articles, as Binford later refers to them, that began with "Archaeology as Anthropology" (1962) and culminated in the essays collected together in *An Archaeological Perspective* (1972).

as inductive—preoccupied with the recovery and descriptive systematization of the contents of the archaeological record. Their mandate was to ensure that a rigorously problem-oriented approach be instituted in every aspect of archaeological inquiry. Explanatory hypotheses should stand at the beginning of inquiry, as the point of departure for an investigation of the record designed to put them to the test, rather than emerging after the fact as interpretive conclusions designed to account for the data generated by open-ended exploration of the record. The hallmark of this scientific New Archaeology, and its greatest virtue on Watson's account, was a commitment to make the presuppositions of practice explicit and to subject them to systematic scrutiny. It was this, above all, that marked "the coming of age of a discipline still influenced . . . by treasure hunters and trait chasers" (1972: 212).4

While the philosophical underpinnings of these arguments were elaborated in some detail by archaeologists-Patty Jo Watson's coauthored text, Explanation in Archaeology (Watson, Leblanc, and Redman 1971), offers the most comprehensive such account—what Red Watson added to the internal philosophizing was an intriguing analysis of the distinctively eclectic, interdisciplinary nature of archaeology (1976: 60; 1992a: 257). He concurred that the central goal of a scientific archaeology must be to establish the bases for law-governed explanation and prediction—to "describe, explain, and test generalizations about the cultural behavior that resulted in the remains of past human societies" (1976: 60). But unlike "basal" sciences, he argued, archaeology is heavily dependent upon other social and natural sciences for laws that will sustain the retrodictive reconstruction and explanation of the social, psychological, and bio-physical phenomena that make up its subject matter. Although the ultimate ambition of the New Archaeology was to test expansive theories of cultural evolution and adaptation ("eco-system" theories), Watson argues that, in practice, the impetus for embracing "the general covering-law method of science" came from lower-level problems: those of determining how specific kinds of archaeological material were produced, deposited, altered, transported, and preserved (to paraphrase Watson, 1976: 63). It is an implication of commitment to processual goals that the contents of the archaeological record may mediate testing

⁴ This point about epistemic accountability is central to Watson's critical review of Courbin's sustained critique of the New Archaeology (1992b: 165).

but are not, themselves, the object of testing; the instances against which generalizing laws of cultural process must be tested are the particular forms and trajectories of cultural life that had taken shape in the "natural laboratory" of prehistory, most of which are accessible only indirectly through reconstruction from their surviving material traces. This seems a straightforward enough point but it did not come sharply into focus in archaeological contexts until the early 1980s, after Binford had taken to task those among his followers a "lost second generation" of New Archaeologists—who, he objected, had reverted to descriptive, inductivist practices because they failed to appreciate the complexity of archaeological testing (1977: 1-6; 1981). Since the mid-1980s questions about the nature and role of middle range theory—the wide array of background and collateral knowledge that mediate any use of archaeological data as evidence have been a central concern for meta-methodological analyses in and of archaeology, by philosophers and archaeologists alike (Raab and Goodyear 1984; Kosso 1992; Chippendale 2002; Wylie 2000).

As profound as its impact has been, the New Archaeology was controversial from the outset, facing internal and external challenges to virtually every aspect of the positivism and the functionalist, ecosystem theory that were the main planks in its programmatic platform. The most strident of these challenges arose from a growing appreciation of the insecurity introduced by precisely the dependence on middle range theory that had begun to concern Binford by the time the New Archaeology became a dominant force within North American archaeology. Despite categorically rejecting the inductivist practice of traditional archaeology, it quickly became clear that the deductive alternatives he had championed (specifically the H-D model of confirmation) were themselves dependent on broadly inductive forms of inference; even when it is possible to draw archaeological test implications with deductive certainty (itself a rare circumstance), judgements about the import of specific archaeological results are almost inevitably ampliative. In short, archaeological evidence is richly theory-laden; in the language of the most outspoken critics, it is radically a construct.

The response of loyalists to the cause of the New or processual archaeology was to redirect their efforts from archaeological testing to experimental and ethnoarchaeological research designed to secure the linking principles—the middle range theory—on which archaeologists rely when they interpret their data as evidence for (or against)

claims about specific events and conditions in the past and, by extension, cultural processes. By contrast, post-processual critics of the New Archaeology insisted that the insecurities of inference inherent in archaeological interpretation were only relocated, not resolved by such strategies. The most extreme among them, chiefly Michael Shanks and Christopher Tilley, and in some moods, Ian Hodder (all Cambridge trained British archaeologists), drew the conclusion that any interpretation of archaeological data is viciously circular: whatever their positivist scruples, archaeologists necessarily "create facts" (Hodder 1983: 6), consequently there is "literally nothing independent of theory or propositions to test against" (Shanks and Tilley 1987: 111). Although they are ambivalent about the corrosive implications that follow from such a line of argument, the equation of "theory laden" with "theory corrupted" (Watson 1990: 677) leads postprocessualists to a position of radical social constructivism; what we understand about the past is always already prefigured by, indeed, it is inevitably a projection of, contemporary political interests and commitments, whether we are aware of this or not. At this point, Watson objects, they turn away from the concerns of science and embrace a wholesale, nihilistic scepticism.

Watson had not engaged the debates generated by criticism of the New Archaeology as these unfolded in the 1980s, but the provocation offered by Shanks and Tilley was irresistable. Some fifteen years after he had first endorsed the New Archaeology in print, Watson re-entered the fray and published several caustic rebuttals to postprocessual criticisms of the New Archaeology in which he dissects the myriad ways in which they substitute rhetorical sleight of hand for careful analysis, relying on arguments that are manifestly incoherent, self-defeating and, on most key points, conceptually and empirically unsubstantiated. Their stock in trade, on Watson's analysis, is an oppositional strategy of argument that turns on the use of "stereotyped concepts of positivism, capitalism, and science uncritically, as though they apply universally," violating their own principled rejection of totalizing master narratives (Watson 1990: 678, 680; 1991b: 400–402). The most prominent of these stereotypes—the "faithful scarecrow" that serves as the main foil for their arguments against the scientism of the New Arcaheology—is the "straw-man positivist who always posits universal laws of the type 'All X is Y'" (1990: 679), who threatens to impose "a strict formal method" on research

practice (1991a: 278), and takes the certainty of deductive inference to be the measure of epistemic adequacy in science (1991a: 276; see also 1992a: 260–263).

At some junctures Watson objects that the postprocessualists simply misunderstand, or wilfully misrepresent, the claims made by sophisticated exponents of logical positivism/logical empiricism: Hempel was a fallibilist; his amended models of explanation and confirmation took into account the role of statistical laws and broadly inductive inference; and heirs to the positivist tradition in which he worked have since developed sophisticated analyses of scientific inference that refine his models (1990: 661-662). But elsewhere Watson seems to acknowledge that, in fact, the key features of the vernacular positivism to which post-processualists take exception had been prominently endorsed by the New Archaeologists when they first advocated a distinctively scientific research program in the late 1960s and early 1970s. In these contexts he objects, not that postprocessualists unfairly caricature philosophical positivism, but that they fail to appreciate the spirit in which the New Archaeologists had embraced these shadow-positivist theories of science. The idealized D-N and H-D models of explanation and confirmation that they invoked were a source of heuristic advice (1991a: 278; 1992a: 264-265), not of formal guidelines to be construed literally and rigidly followed in practice. When postprocessuals invoke critiques of logical positivism that had been pivotal in philosophy of science—arguments from underdetermination, the theory-ladenness of evidence, and Quinean holism— Watson objects that these internal, technical debates are strictly irrelevant to archaeology. "So what if many philosophers reject positivism" (1990: 280). The critical groundwork had been laid for the widely heralded demise of logical positivism by the time the New Archaeologists embraced Hempelian models, but this has no bearing on the pragmatic value of these models outside philosophy. Their value lies in the intuitions they articulate about the critical spirit of science and the need for systematic, problem-oriented strategies of empirical testing, not in the formalism—the vicious logicism (1992a: 263)—that philosophers have found wanting (1991a: 278). As one staunch New Archaeologist put this point in response to the first rumblings of postprocessual discontent, "archaeologists are under no obligation to maintain the ritual purity of particular philosophical doctrines—however sacred" (Plog 1982: 28).

In his most uncompromising defenses of the New Archaeology Watson generalizes this last objection. When post-processual critics

conclude that relativism is unavoidable, given the untenable nature of positivist ideals, the central problem is not that they misconstrue the scope and implications of post-positivist arguments but that they transgress the boundary between philosophy and science. They embrace a wholesale epistemic scepticism and sometimes a metaphysical anti-realism that undermines the conceptual foundations of science: "the working assumption (hypothesis) that the world and the things in it exist," and that they are knowable, albeit in fallible terms, "is an essential part of the science and practice of archaeology" (1991a: 280; 1992a: 258). To challenge these framework assumptions is to raise philosophical worries that can never be decisively countered (certainly not in scientific terms), and to forsake the constructive, mitigated scepticism about particular knowledge claims that is the cornerstone of scientific inquiry. In the end, Watson insists, such an extreme reaction against positivism is futile; metaphysical anxieties about whether there is a real world and whether we have any knowledge of it "cannot override common sense and has always been impossible to maintain in practice" (1991a: 281). Science does not need defense against this kind of scepticism and, indeed, there is none to be had.⁵ His advice to scientists is that they set aside these philosophical concerns: "philosophy just does not matter to science" (1991a: 280). As he says of life in general, practitioners should just "get on with it" (1983: 307). His advice to archaeologists is that they should ignore his earlier recommendations in favor of philosophical self-consciousness; where he had congratulated Binford for "making archaeological theory exciting in the 1960s," he now hopes he will have succeeded in "ma[king] archaeological theory boring in the 1990s by showing why it is irrelevant to practicing archaeology" (1991a: 281, citing 1972: 212).

Watson never did suffer fools gladly and there was much in this cross-field engagement between philosophy and archaeology that was unconscionably foolish. But I submit that what he rails against is not philosophy (or theory) as such; indeed, I have argued elsewhere that there is considerable slippage in what Watson identifies as philosophy and declares off-limits for practitioners (Wylie 1992: 210–211).⁶ Rather, his quarrel is with a particular strain of shadow philosophy

⁵ Elsewhere he objects that "one can decide such a question [the broad metaphysical kind of question raised by postprocessualists] only by refusing it" (1991b: 403).

⁶ For the most part the philosophy Watson rejects as irrelevant to practicing scientists is narrowly defined as abstract metaphysics: "questions of ultimate being transcendent to empirical experience" (1992a: 259), "'Do we have certain truth?' and

of science that has come to exercise enormous influence outside the confines of professional philosophy, and not only in archaeology. As Rogers says in comment on Watson's discussion of shadow histories in philosophy, "philosophers are not the only readers of the history of philosophy" (1993: 118). Read in these terms, and against Watson's general discussion of shadow history, I draw rather different lessons than he does from his critical analysis of processual:post-processual debate in archaeology. Shanks and Tilley, among others, went wrong because they drew radically overextended conclusions from otherwise sensible philosophical and archaeological insights about the complexity of the relationship between theory and evidence—insights that were generated, in part, by subjecting the central tenets of logical positivism to sustained critical scrutiny. As Watson says in a later review of Tilley, "a good principle in philosophy—and in theoretical work in general—is to back up and start over if your present position leads you to nutty results" (1991b: 400). In the case of postprocessualism the premises that require reassessment are those that lead to the conclusion that the only alternative to an untenable shadow positivism is extreme constructivism.

^{&#}x27;What is ontologically real?' or 'Did the past exist'" (1991a: 280). It is philosophy restricted to the questions that remain after a succession of sciences have taken over most of what was once the proper domain of philosophy. At other points Watson includes debates about scientific realism and scientific empiricism withing the scope of scientifically irrelevant philosophy (1991a: 279). There is some incongruity here. Watson distinguishes philosophy in the strict (metaphysical) sense not only from science but also from philosophy of science which he characterizes as "a cognitive, analytical part of science" (1991a: 279): "not metaphysics but merely a handmaid of science" (1991a: 280), a matter of conceptual analysis that serves to clarify scientific concepts, language and logic (1991a: 279; 1992a: 259). Philosophy of science is safe for scientists, so long as it functions in a strictly heuristic support capacity and does not broach foundational questions about the broader metaphysical commitments that underpin empirical research. But where debates about scientific realism and empiricism are concerned, the divide between foundational questions and internal conceptual analysis is by no means as clear cut as Watson suggests. The kinds of questions about realism and empiricism that have been central to post-positivist philosophy of science include a range of issues that routinely arise within the sciences and have direct bearing on internal theoretical and meta-methodological debates: questions about how to construe empiricist requirements of accountability to evidence and how to discriminate when a realist rather than a non-realist or agnostic stance is appropriate with respect to specific kinds of theoretical posits. Sometimes debate about these issues destabilizes entrenched research programs and precipitates highly productive critical assessment of assumptions that had been taken for granted within a particular scientific tradition (metaphysical and epistemic). It would seem inimical to the critical spirit that Watson endorses as the heart and core of scientific practice to delimit, in advance, the range of questions that philosophically minded scientists and philosophers of science can legitimately engage.

Watson's own earlier analysis of the eclectic nature of archaeology-his careful amendment of the New Archaeology mandate to test laws of cultural process and his account of the role of background knowledge in archaeological inference—suggests a promising strategy of response to the false dilemma responsible for the philosophical excesses in archaeology that he later came to deplore. The key to understanding how the archaeological record can sometimes impose robust evidential constraints on claims about the cultural past despite being an interpretive construct is the insight, suggested by Watson in 1976, that theory-ladenness is by no means all pervasive or seamless; the theories that mediate the interpretation of archaeological data as evidence are not necessarily (or often) the same as, or components of, the theories archaeologists are intent on testing about the cultural past. In practice archaeologists routinely exploit what might be described as an extended strategy of bootstrap testing; they make use of multiple lines of evidence, and they exploit the epistemic independence between linking assumptions and test hypotheses, in ways that can (to varying degrees) circumvent just the kind of vicious circularity that preoccupied post-processuals and gave rise to the metaphysical and epistemic angst pilloried by Watson (e.g., Glymour 1980; for archaeological development of this point, see Kosso 1992; Wylie 1986). Postpositivist philosophers of science have turned their attention to just these kinds of research strategy, developing finegrained analyses of evidential relevance in response to questions that had not been, and could not be, adequately addressed using the resources of Hempelian models of confirmation (or Popperian models of falsification, for that matter).

The most telling objection Watson makes to the philosophizing of post-processuals is that their forrays into philosophical territory were selective and ill-informed; although they invoke critiques of logical positivism/empiricism, they pay no attention to the constructive analyses of scientific practice by which post-positivist philosophers of science have sought to build more adequate models of scientific explanation, hypothesis testing, theory formation. It is the perpetuation by post-processuals of a shadow philosophical debate about science that is the problem, not their engagement with philosophical issues as such. Shadow positivism may have been heuristically fruitful and rhetorically powerful in framing a vision of scientific practice at a point when archaeologists were overwhelmed by crisis debates about the goals, subject, standards of their discipline. But it proved to be conceptually

limiting when they engaged in more searching analysis of how these scientific ideals might be instituted. The best antidote to the conceptual nonsequiturs that Watson rightly impugns when he reentered debate about the New Archaeology is not the banishment of philosophy—shadow or otherwise—but the cultivation of exactly the kind of rigorous engagement with philosophical thinking about science that he initiated in the 1970s. As Watson says in "How to Die": "The crucial thing is commitment, and carrying through" (1983: 309).

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EXERCISES IN BETRAYAL: PHILOSOPHY IN TRANSLATION

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Every translator ought to be haunted by John Dryden's warning in his preface to Ovid's Epistles, translated by several hands (1680). "No man is capable of translating poetry", he writes, "who besides a genius to that art, is not a master both of his author's language, and of his own. Nor must we understand the language only of the poet, but his particular turn of thoughts, and of expression, which are the characters that distinguish, and as it were individuate him from all other writers." This commonplace yet intimidating credential, if transferred to the philosophical world with strict application, would disqualify every English-language manifestation of Descartes, Pascal, Spinoza, Huygens, Leibniz, and the Latin Newton, that I have come across, or have perpetrated myself. Still, I enjoy translation and its challenges as an integral part of my work as a historian of philosophy and of science, so I hope not to be reminded too often of Dryden looking over my shoulder as I turn some piece of Latin or French into English. After all, he is looking over many other shoulders in my discipline, so at least I do not feel a sense of isolation when engaged in translation.

A great deal has been written over the centuries on the problems of translation, from Classical times through the Renaissance and early modern period down to our own time. Borges has written somewhere that "no problem is as completely concordant with literature and with the modest mystery of literature as is the problem posed by a translation." That sets me wondering how far the problems of translation have encouraged historians of philosophy and of science to address cognate problems in their respective disciplines. To paraphrase Borges, "few problems are as completely concordant with our understanding of the philosophy and science of the past, and with the profound mysteries of those modes of thought, as are the problems

¹ Keith Walker (ed.), John Dryden (Oxford University Press, 1987), p. 163.

posed by a translation of the texts of these disciplines." Translation is not a piece of spade-work we get through *prior to* writing our intellectual histories or embarking on philosophical analysis. It is a constitutive part of those activities, where we see the messages of the texts arising from our translation-in-progress. It follows that our understanding of a text of the past is limited to the extent that we rely on the translations of others, rather like relying on someone else's interpretation of a text in your native language, instead of reading it yourself. Borges has said that "the translator is a very close reader; there is not much difference between translating and reading." Doing intellectual history well means doing your own translations, if at all possible, and translators of philosophical and scientific texts of the past who do not pay unremitting attention to the historical determinants of semantic forms will often fail to do their job properly.

The lesson is clear enough, though perhaps its implications have not provoked enough discussion among historians of philosophy or science. Nor has it had a widespread impact on the quality of translations themselves. The standard of translation in the twin professions of history of philosophy and history of science is not at the same level as the standards of historical and conceptual analysis that come into play when the translator doubles as intellectual historian. At any rate, that is the impression I get on perusing certain translations by serious scholars published by serious academic publishers or in learned journals.³

I want to deal with three broad categories of "issues in translation" within the histories of philosophy and of science. The first category is questionable or misleading translations that arise from not paying attention to the historical or cultural factors that determined the meanings of terms and expressions used by the author in the source language. Mistranslations of this sort are legion, as is well known to every historian of ancient, medieval and early modern philosophy and science.⁴ They have a long history too. Heidegger would have

² Quoted in Norman Thomas Di Giovanni, "Sprinkle of Gold Dust", special page on translation, *The Independent* (London), August 26, 1989.

³ See further Jonathan Rée, "Being foreign is different: Can we find equivalents for philosophical terms?", *Times Literary Supplement*, September 6, 1996, pp. 12–13.

⁴ See my "Letter to the Editor", *British Society for the History of Philosophy Newsletter*, vol. 3, no. 2, October 1998, pp. 2–4. The letter is about the mistranslation of Descartes's title *La Dioptrique* in John Cottingham, Robert Stoothoff, Dugald Murdoch, ed. and trans., *The Philosophical Writings of Descartes*, 2 vols. (Cambridge UP, 1985). Henceforth abbreviated as CSM.

it that the Latin philosophical tradition arose from wholesale mistranslations of the Greek terminological legacy. For the Greeks "questioning about beings as such and as a whole", beings were called *phusis* (φύσις), customarily translated as *natura*, from the root verb "to be born", in German and English "die natur" and "nature". With this Latin translation, claims Heidegger in his *Introduction to Metaphysics*,

the originary content of the Greek word *phusis* is already thrust aside, the authentic philosophical naming force of the Greek word is destroyed. This is true not only of the Latin translation of *this* word but of all other translations of Greek philosophical language into Roman. This translation of Greek into Roman was not an arbitrary and innocuous process but was the first stage in the isolation and alienation of the originary essence of Greek philosophy. The Roman translation then became definitive for Christianity and the Christian Middle Ages. The Middle Ages translated themselves into modern philosophy, which moves within the conceptual world of the Middle Ages and then creates those familiar representations and conceptual terms that are used even today to understand the inception of Western philosophy. This inception is taken as something that we have left behind long ago and supposedly overcome.⁵

That's bad news for the history of Western philosophy, though Heidegger's claim that *natura* is a mistranslation of φύσσις is not borne out by Liddell & Scott, which gives a wide range of meanings for φύσσις, including "origin", "nature personified", "the regular order of nature", "nature as originating power", and "the principle of growth". The quotation from the *Introduction to Metaphysics* tells us more about Heidegger's thought than it does about Greek or Latin philosophy.

Nevertheless, Heidegger's remarks are a warning to be wary of Greek linguistic gifts in Latin garb, and by extension, to be wary of any linguistic gifts in garb borrowed from the translator's wardrobe. So we should be on our toes when Latin garb is cast off for something more modern. In Nick Jardine's edition and translation of Kepler's Defence of Tycho against Ursus there is a reminder that some translation problems are not a question of finding le mot juste, but of understanding why there isn't any mot juste to find. Jardine notes that no sixteenth-century term has the connotation of the modern sense of "theory", and that theoria, which was current in the sixteenth century, meant

⁵ Martin Heidegger, *Introduction to Metaphysics*, trans. Gregory Fried and Richard Polt (New Haven; London: Yale University Press, 2000), pp. 14–15. On Heidegger's account of φύσις see Taylor Carman, "Heidegger's Concept of Presence", *Inquiry* 38 (1995), 431–53: pp. 437–39.

contemplative knowledge (speculatio, meditatio, contemplatio) as opposed to practical or operative knowledge. So theoria must not be translated as "theory"; conversely, there is nothing in the astronomy of the period that corresponds to "theory" in the modern sense, even though Kepler and others introduced notions that are very close to it. Jardine is right to speculate on the possibility that "the concept of a theory can be understood only in the context of general changes in men's presuppositions about the relation of language to the world."

A different sort of example is the term "experience", one of those words we all know how to use, but which we would have difficulty pinning down with a precise definition each time we use it. So when we meet experientia in a Latin text, it is easy to substitute "experience" without it being crystal-clear that we know exactly what notion is being translated or what notion the translated text will convey to the reader. Micraelius explains that experientia is "general knowledge [scientia universalis] built up from several similar particulars; or alternatively, it is the observation and memory of that which has been seen often and in the same way". This neat definition helps clarify many appearances of experientia in Latin philosophical writings of the early modern period. It is the sense of experientia at work in Spinoza's Ethics, for example, where in most instances of the term it is a question of the knowledge of empirical generalizations catalogued in the memory. One outcome of analysing the term along these lines is that Spinoza's notion of experientia vaga ("random experience") turns out to have an inerratic meaning with roots in medieval logic.8

My second category of issue in translation is the difficult one of the links between, on the one hand, syntactical and grammatical structures and their terminological components, and on the other, the conceptual structures to which they correspond. The work of Benjamin Whorf comes to mind in this context. Whorf argued that conceptual organizations of nature in a given culture depend on the structure and pat-

⁶ Nicolas Jardine, The Birth of History and Philosophy of Science: Kepler's A Defence of Tycho against Ursus, with essays on its provenance and significance (Cambridge and New York: Cambridge University Press, 1988), pp. 183–85.

⁷ Johann Micraelius, Lexicon philosophicum terminorum philosophis usitatorum ordine alphabetico sic digestorum, ut inde facile liceat cognosse, praesertim si tam Latinus, quam Graecus Index praemissus non negligatur, quid in singulis disciplinis quomodo sit distinguendum est definiendum. 2nd ed. (Stettin, 1662), col. 486. (First ed., Jena, 1653.)

⁸ See my "Spinoza's natural science and methodology", in Don Garrett (ed.), *The Cambridge Companion to Spinoza* (Cambridge and New York: Cambridge University Press, 1996), pp. 142–191: 172–176.

terns of the corresponding language. This means that we cannot talk in this or that language without implying acceptance of the corresponding conceptual framework or frameworks. He claims, for example:

various grand generalizations of the Western world, such as time, velocity and matter, are not essential to the construction of a consistent picture of the universe.⁹

And elsewhere:

Science... has not yet freed itself from the illusory necessities of common logic, which are only at bottom necessities of grammatical pattern in Western Aryan grammar: necessities for substances which are only necessities for substantives in certain sentence positions, necessities for forces, attractions, etc. which are only necessities for verbs in certain other positions, and so on...¹⁰

Whorf hasn't got it right. His basic claim is that conceptualizations of the world are determined by pre-existing linguistic structures. It's more likely to be the other way round. The structures of our languages derive in part from our sense of what the world is like, of how it works or of what goes on in the world. I cannot argue this thesis in this paper, nor indeed in any paper, since it would require knowing something substantial about the origin of language, and I know even less about it than do those who have more authoritative reasons than I for recognizing their ignorance of the matter. Yet it is surely a plausible claim that at some point in our evolutionary development we learned in some sense about what is the case in our experience before we learn how to talk about what is the case. Many non-human animals, and infants, know in some sense a great deal about what is going on around them without possessing the syntactic apparatus to communicate to others what they know.

More convincing than Whorf is Thomas Reid, the leader of the eighteenth-century Scottish Common Sense School of philosophy. In the opening chapter, on "Explication of words", of the Essays on the Intellectual Powers of Man (1785), Reid notes that impressions are changes produced in passive subjects through the operation of external causes,

⁹ Benjamin Lee Whorf, "Science and linguistics", Technological Review 42 (1940), p. 216.

¹⁰ Benjamin Lee Whorf, "Language, Mind, and Reality", *The Theosophist* 1942 (January and April), p. 270. This paper and the one in note 9, and related papers, were republished in *Language*, *Thought*, and *Reality*, *Selected Writings of Benjamin Lee Whorf*, ed. John B. Carroll (Cambridge, Mass., M.I.T. Press, 1976 (1956)).

and so changes internal to an active being caused by its own active power are never called impressions, but acts or operations. In particular:

If seeing, hearing, desiring, willing, be operations of the mind, they cannot be impressions. If they be impressions, they cannot be operations of the mind. In the structure of all languages they are considered as acts or operations of the mind itself, and the names given them imply this. To call them impressions, therefore, is to trespass against the structure, not of a particular language only, but of all languages.¹¹

Stepping across this Humean transgression against common linguistic usage, Reid makes a general claim of great importance:

There are certain common opinions of mankind, upon which the structure and grammar of all languages are founded. . . . we find in all languages the same parts of speech, the distinction of nouns and verbs, the distinction of nouns into adjective and substantive, of verbs into active and passive. In verbs we find like tenses, moods, persons, and numbers. There are general rules of grammar, the same in all languages. This similarity of structure in all languages shows an uniformity among men in those opinions upon which the structure of language is founded.

If, for instance, we should suppose that there was a nation who believed that the things which we call attributes might exist without a subject, there would be in their language no distinction between adjectives and substantives, nor would it be a rule with them that an adjective has no meaning, unless when joined to a substantive. If there was any nation who did not distinguish between acting and being acted upon, there would in their language be no distinction between active and passive verbs, nor would it be a rule that the active verb must have an agent in the nominative case; but that, in the passive verb, the agent must be in an oblique case.

The structure of all languages is grounded upon common notions, which Mr Hume's philosophy opposes, and endeavours to overturn.¹²

Reid couldn't have known that much about all the world's languages (Hopi studies cannot have been well advanced in eighteenth-century Scotland), yet he had sharper insights than Whorf into the relations between language and the passing show. If Reid is correct in holding that states of affairs in the experienced world are the templates on which syntactic structures have been formed, then there are immediate implications for the business of translation. Whether or not he is correct in his belief that every language distinguishes between sub-

¹¹ Thomas Reid, Works, ed. Dugald Stewart, 3 vols. (New York, 1822), vol. 1, p. 355.

¹² *Ibid.*, pp. 355-356.

stantive and adjective, between tenses and moods, between active and passive, the fact that these distinctions exist in Greek and Latin, and in the Romance and Germanic languages, implies that the respective cultures that use these languages share some set of fundamental categories through which ordinary, everyday experience of the world is made intelligible and communicated. The evolution of scientific and philosophical thought usually involves conceptual re-organizations, changes and transformations at a fundamental level. So we find tensions between syntactic structures and the semantic content of innovations in scientific or philosophical thinking. These tensions become especially noticeable during translation between languages with differing sets of grammatical and syntactical rules, and with differing, historically-embedded degrees of adaptability for expressing those innovations. We cannot always assume direct and unproblematic semantic transfer between the languages historically responsible for communicating the scientific and philosophical achievements of the now increasingly beleagured "Western tradition".

The indeterminacy of translation and the incommensurability of paradigms come to mind here, though I hadn't intended this part of my paper to be a variation on Kuhnian, Quineian or Davidsonian themes. Davidson was right to point out that Kuhn's doctrine of the incommensurability of paradigms, in its original form, was a mistake. 13 However, Kuhn subsequently modified and improved the doctrine as a result of criticisms from Davidson, Kitcher, and others, notably in his paper on "Commensurability, Comparability, Communicability" (1982). There Kuhn distinguishes between translation, the semantic and stylistic transfer between two different languages and carried out by someone who knows both languages, and interpretation, the search for intelligibility in other forms of discourse, whether or not in a different language. As for "incommensurability", Kuhn in 1982 reserves the term for those cases in which speakers of the other language structure the world differently from the way English speakers do, using terms that are untranslatable into English. English speakers may learn to use these terms, but they speak the other language when they do. 14 The trouble with this sense of "incommensurability" is that

¹³ Donald Davidson, "On the Very Idea of a Conceptual Scheme" (1974), reprinted in his *Inquiries into Truth and Interpretation*, 2nd ed. (Oxford: Clarendon Press, 2001), pp. 183–198.

Thomas S. Kuhn, "Commensurability, Comparability, Communicability", *Philosophy of Science Association* 2 (1982), 669-686: pp. 671-673.

Kuhn assumes that this is what often happens when the historian of science, whose native language is that of the scientists under scrutiny, tries to understand the scientific thought of the past. But by his own distinction, that is not a matter of translation, but of interpretation. If the historian's native language is not that of his historical subjects, the situation becomes much more complicated, because interpretation and translation then join together to make for a single big headache for the intellectual historian, in which the syntactic and grammatical characteristics of the source language intertwine with the scientific or philosophical thoughts the translator-cum-interpreter is trying to transmute into his own language.

Take the verb "to move". It has both transitive and intransitive forms, which are sometimes determined by appropriate complements or objects. "The body moves" is ordinarily read intransitively, meaning that the body is in a state of motion, but it could also have the transitive sense of "the body moves [something else]". In Latin, on the other hand, the active "corpus movet" usually means "the body moves [something]", whereas the usual way of conveying the instransitive sense of "the body moves" is "corpus movetur"—literally "the body is moved", where the passive voice is used reflexively, equivalent to the Greek middle. Now the most important group of Latin verbs whose passive forms can be used intransitively are those that signify *changes* of some kind, which include local motions. This syntactical rule seems to reflect early suppositions about the causality of change that were codified in a formal way within what became the Aristotelian tradition.

What then of the links (if any) between this grammatical situation and changing views on the relations between the motion of bodies and the forces that cause or maintain such motions? The question is greatly complicated by the fact that the intransitive to move was used in medieval English, centuries before "the inertial principle" evolved by Descartes and Newton. On the other hand, the Latin passive movetur, implying that the body is being moved by something else, is nearly always used to mean "it moves" in the writings of Descartes, Newton, and others who are traditionally claimed to have advanced revolutionary views on the causal relations between motions and forces. The point is made by considering one of the several pre-Cartesian formulations of the persistence-in-motion principle Isaac Beeckman wrote into his Journal around 1618: "Quod movetur, semper movetur

nisi impeditum".¹⁵ Do we translate the grammatical sense, with which Aristotle would have agreed: "That which is moved is always moved unless impeded"? Or do we convey the intended semantic content: "That which is moving always moves unless impeded"?

When we find "in orbe suo movetur" in a sixteenth-century astronomical text we can confidently translate it as "[the celestial body in question] is moved in its orb/sphere", because it was then believed that a crystalline sphere or orb was the cause of the body's motion. What do we do when we find Newton using similar language in the early eighteenth century?¹⁶ For the 3rd edition (1726) of his *Principia* Mathematica Newton wrote a subsequently deleted draft of Prop. 17, Bk. III in which we read: "Si Luna in Orbe suo circam terram uniformi cum motu sine Latitudine ferretur haec Terram eadem sui facie semper respiceret." That is, literally, "If the Moon were to be borne in her orb about the earth with uniform motion without latitude, it would look towards the Earth always with the same face."17 Borne by what? Or should we ignore the difficulty by translating simply "If the Moon were to move in her orb...."? The special difficulty here is that this text was written well after Newton had abandoned Cartesian deferent vortices. Again, in drafts for revisions of the first-edition Book III that Newton wrote probably in the early 1690s there is a corollary which reads: "Coroll. 9. Datur spiritus infinitus et omnipraesens in quo materia secundum leges mathematicas movetur."18 Are we to understand that there is a infinite and omnipresent spirit in which matter is moved according to mathematical laws,

¹⁵ Journal tenu par Isaac Beeckman de 1604 à 1634, ed. Cornelis de Waard, 4 vols. (3 vols. + Supplément) (The Hague: Nijhoff, 1939–1953), vol. I, p. 157.

¹⁶ For a discussion of the same grammatical problem with "corpus gyrat" and "gyretur corpus", both of which Newton uses in the *Principia* to refer to the same posited state of affairs, see J. Bruce Brackenridge, *The Key to Newton's Dynamics: The Kepler Problem and the Principia, Containing an English Translation of Sections 1, 2, and 3 of Book One from the First (1687) Edition of Newton's Mathematical Principles of Natural Philosophy, with English trans. from the Latin by Mary Ann Rossi (Berkeley: University of California Press, 1995), pp. 226, 286–287. Rossi and Brackenridge distinguish between the intransitive and passive forms in their quite literal translation of these and similar expressions, in contrast to Cohen, who translates them both intransitively. See his comments on the problem in <i>Isaac Newton, The Principia, Mathematical Principles of Natural Philosophy*, new translation by I. Bernard Cohen and Anne Whitman, assisted by Julia Budenz, preceded by A Guide to Newton's Principia, by I. Bernard Cohen (Berkeley, University of California Press, 1999), pp. 37–41.

¹⁷ Cambridge University Library, Add. Ms 3965, fol. 446v.

¹⁸ *Ibid.*, fol. 266v.

or in which it *moves* according to mathematical laws? The answer makes quite a difference. This corollary cannot be translated, or indeed be understood in the original Latin, unless we know Newton's views on the legislative relations beween God (the infinite *spiritus* in question) and the laws of His creation, and therefore his views on the kind of causality that is involved in bodies moving according to those laws.

Newton's "hypotheses non fingo", the famous refrain endlessly retailed by scientists and historians of science, invites a question that falls within a third category of issue in translation: the need to refresh and continually re-examine translations of terms, phrases, or passages that have become accepted and familiar partly because of their seemingly unexceptional and unproblematic nature. The relevant sentence in the General Scholium of the Principia Mathematica reads: "I have not as yet been able to deduce from phenomena the reason for these properties of gravity, and I do not feign hypotheses."19 Now, "I do not feign hypotheses", the standard translation, is in what modern grammarians call the habitual simple present, so it has the form of a declaration of principle, like "I do not trust experiments", or "I do not tell lies". Yet it seems that no one (except John Nicholas, University of Western Ontario, and myself) has noticed that fingo also translates into the present progressive. If we use the progressive aspect of the present to revise the Cohen & Whitman translation, we get a quite different meaning: "I have not as yet been able to deduce from phenomena the reason for these properties of gravity, and I am not feigning hypotheses." No longer a statement of methodological principle, "hypotheses non fingo" is now simply Newton's refusal in the General Scholium to hypothesize on the causes of gravitational phenomena. In the next sentence he explains: "For whatever is not deduced from the phenomena must be called a hypothesis; and hypotheses, whether metaphysical or physical, or based on occult qualities, or mechanical, have no place in experimental philosophy."20 Here we do have a general methodological principle, but that is in keeping with the revised translation of "hypotheses non fingo", which now becomes an instantiation of the principle in a particular case, not the principle itself. As far as I can judge, the present progressive translation of "hypotheses non fingo" is compatible with the differing manuscript versions of the corresponding passage from the General Scholium.

¹⁹ The Principia, new translation by Cohen and Whitman, p. 943.

²⁰ Ibid.

Red Watson's recent lively biography of Descartes bears the title Cogito ergo Sum: The Life of René Descartes.21 What other candidate for main title would have caught the eve quite as effectively? The emblematic status of the most famous catch-phrase in all philosophy almost guarantees its candidacy for inclusion in the title of a biography of its author. But it joins Newton's "Hypotheses non fingo" within my second category of issue in translation, and for similar reasons, a circumstance that I know Red, fully aware of the pitfalls of translation, will appreciate. The slogan "Cogito ergo sum" is the short version of the "Ego cogito, ergo sum", which appeared in the Principia Philosophiae (1644), or of "Ego cogito, ergo sum, sive existo", which appeared in the Latin translation of the Discours de la Méthode (1644). The slogan is common currency, but is its translation into English a straightforward matter? I think not. There are eight possibilities, or four, if we drop "I am" in favor of "I exist": "I think, therefore I exist"; "I think, therefore I am existing"; "I am thinking, therefore I exist"; "I am thinking, therefore I am existing". These all translate the Latin tag and its French equivalent in the Discours de la Méthode (je pense, donc je suis), yet they mean different things, because of the distinction in English between the simple present and the progressive aspect of the present, a duality of verb form not reflected in the verb forms of the present tense in Latin and the Romance languages. My claim is that Descartes' equivalent phrases "cogito ergo sum" and "je pense, donc je suis", have been misleadingly translated many times in English translations of Descartes, and in scores of articles and books where the phrase has been quoted. The CSM translation is one of those that gets it almost right: "I am thinking, therefore I exist", which is very close to what Descartes means.²² The Evil Demon can deceive Descartes as much as he likes, but he cannot bring it about that Descartes is not existing as long as Descartes is thinking, because it is impossible for the Demon to make nothing think. So to be picky about it, the CSM translation should be amended to "I am thinking, therefore I am existing", which is precisely what Descartes means in Meditation II, even though the formulation of the idea there takes a different form. Descartes's words leave no doubt that the present progressive is the right way to convey in English the meaning

²¹ Richard Watson, Cogito ergo Sum: The Life of René Descartes (Boston: David R. Godine, 2002).

²² CSM, I, p. 127.

of "cogito ergo sum": "I am, I am existing, that is certain. But for how long? For as long as I am thinking; for it could still happen that if I stopped having any thoughts at all, I would likewise entirely cease to exist".

On the other hand, "I think" is in the habitual simple present, unless it were to be complemented, as in Ambrose Bierce's improvement of Descartes: "I think I think, therefore I think that I exist". "I think" belongs in the same grammatical category as "I sing", "I play bridge", or "I do not feign hypotheses". However, habitual states are not the issue in the cogito argument, because Descartes's existence is prior to the identification of any of his habitual dispositions. In the first English translation of Descartes's Discourse on Method (1649), the translation reads: "I think, therefore, I am". 23 Is this a mistake, or have I got it wrong? Neither. In early English the simple present was used more widely than the present progressive to refer to events in the present.24 I suspect that the retailing of this detail of the 1649 translation has continued through to modern times, with few translators noticing that because the present progressive had overtaken the simple present in this role, a parallel updating of translated Descartes was called for.

Before leaving Descartes, there is another intriguing difficulty in *Meditatio II*. After the pivotal *cogito* conclusion, Descartes asks "what am I?" and replies: "Res cogitans. Quid est hoc? Nempe dubitans, intelligens, affirmans, negans, volens, nolens, imaginans quoque, & sentiens." CSM were apparently troubled by the absence of a modern English equivalent of the antonymous Latin couple *volo-nolo*, yet their attempt to preserve the antonymy produces a unsettling ambiguity: "But what then am I? A thing that thinks. What is that? A thing that doubts, understands, affirms, denies, is willing, is unwilling, and also imagines and has sensory perceptions." Descartes's *res cogitans* can will to do something or will not to do something, whereas his translators' *res cogitans*, assuming an ordinary reading of their text, can be just favorably disposed or prepared to do something, or reluctant to do it. I am willing to concede that CSM's translation does not seriously damage the philosophical point of the sentence, but I

²⁵ CSM, II, p. 19.

²³ A Discourse of a Method For the well guiding of Reason, And the Discovery of Truth In the Sciences (London, 1649), p. 51.

²⁴ Randolph Quirk and others, A Comprehensive Grammar of the English Language (London and New York: Longman, 1985), p. 181.

am unwilling to agree that it is what Descartes meant. There used to be an old English verb "to unwill", which nicely counterpoises "to will", but it's archaic, and it would take some getting used to. William Molyneux, the translator of the first English edition of the *Meditations* (1680), had a neater solution that today would be harder to get used to: "Let me ask therefore what I am, A Thinking Thing, but What is That? That is a thing, doubting, understanding, affirming, denying, willing, nilling, imagining also, and sensitive."²⁶

This paper has been an exhortation to move translation to the front page of the agendas of historians of science and philosophy. There is no shortage of issues and problems. Should a translation read like a translation, as Nabokov thought, or should a translation read like a good piece of prose in the target language? In the case of writers like Descartes or Pascal, the latter is easier said than done. To choose between "I think, therefore I exist " and "I am thinking, therefore I am existing" is to choose between the stylistically elegant that deceives and the stylistically awkward that speaks true.²⁷ And there are cases where it doesn't much matter if the translation reads like a translation, as in the case of texts from the scholastic tradition, where literary style is rarely at a premium. Is the ideal translation—assuming the possibility of such a thing—the text the author would have written had he or she been a native speaker of the target language? But had that been the case, would he or she have written the text in the first place? Had the baby Descartes been translated at birth to London, to spend the rest of his years in England, would he have written English mirror images of the Meditations, the Discourse on Method, the Principles of Philosophy or The Passions of the Soul? I very much doubt it. Had Kant at birth been spirited back to the land of his forefathers, as legend has it, would there have been a Critique of Pure Reason to read alongside his fellow-countryman's Enquiry concerning Human Understanding, without having to be riddled through a translation? I very much doubt that too. Happily, these and other insoluble questions can wait until another occasion.

²⁶ Six Metaphysical Meditations: Wherein it is Proved That there is a God. And that Mans Mind is really distinct from his Body. Written originally in Latin by Renatus Des-Cartes. Hereunto are added the Objections made against these Meditations by Thomas Hobbes of Malmesbury, With the Authors Answers. All faithfully Translated into English, with a short Account of Des-Cartes's Life, by Willam Molyneux (London, 1680), p. 18.

²⁷ The important question of style-versus-content came up in discussion when I presented an earlier version of this paper in a seminar at the New School, New York, December 12, 2002.

THE ROMAN CENSURE OF THE *INSTITUTIO*PHILOSOPHIAE OF ANTOINE LE GRAND (1629–99) ACCORDING TO UNPUBLISHED DOCUMENTS FROM THE ARCHIVES OF THE HOLY OFFICE

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To honor Richard A. Watson's work on the followers and disciples of Descartes, I would like to discuss several documents drawn from the archives of the Holy Office in Rome. The documents are censure notes lodged against the *Institutio Philosophiae, secundum principia Domini Renati Descartes* of Antoine Le Grand, which resulted in the work being placed on the Index in 1709. The study of these documents is also part of the survey of the censure of Cartesianism that I have undertaken since 2001.

Antoine Le Grand was born in Douai in 1629. At the age of twenty he joined the branch of the Franciscan order known as the Recollects in his native city, at the convent of Saint-Bonaventure, which was devoted to training Catholic clergy for missionary work in Great Britain, where the order sent him upon completion of his training in 1656. He lived primarily in Oxford, as warden (that is, superior) of the convent, then becoming a tutor in a Catholic family, the Fermors of Tusmore. He was elected provincial of his order in 1698, a few months before his death on 26 July 1699. Anthony à Wood, the Oxford historian, who was his contemporary, called him "a Cartesian of great note."

Le Grand wrote a great deal, in ethics and other parts of philosophy, and his extensive bibliography is problematic on certain

¹ Now called the Archives of the Congregation for the Doctrine of the Faith (ACDF).

² J.-R. Armogathe, Vincent Carraud, "La première condamnation des *Oeuvres* de Descartes, d'après des documents inédits aux Archives du Saint-Office" *Nouvelles de la République des lettres* (Naples), 2001–II, pp. 103–137; J.-R. Armogathe, "Physique cartésienne et eucharistie dans les documents du Saint-Office et de l'Index romain (1671–1676)", in Tad Schmalz (ed.), *Receptions of Cartesianism* (to be published 2003). ³ *Athenae Oxon.* ed. 1691, vol. 2, p. 620.

entries. After an initial work that is lost, but which is mentioned in the Wadding supplement (Encomium Sapientiae humilis, seu Scotus humilis elucidatus, Douai, 1650),⁴ he published Le sage des stoïques, ou l'homme sans passions, selon les sentiments de Seneque, a work that went through several editions (The Hague, 1662 and Lyons, 1666)⁵ and an English translation (London, 1675). He then⁶ published another ethical treatise, the Épicure spirituel ou l'empire de la Volupté sur les Vertus (Paris, 1669 [?], English translation, London, 1676) a utopian dialogue, the Scydromedia, seu sermo quem Alphonsus de la Vida habuit coram Comite de Falmouth, de Monarchia (London, 1669 et Nüremberg [?], 1680).

The philosophical work of Antoine le Grand might be seen as the dying spark of Cartesianism, the last gasp before the Breakdown of Cartesian Metaphysics (to cite the magnum opus of Raichard A. Watson, who devotes several pages to him). Indeed, after his ethical and political works, Le Grand published a Philosophia veterum, e mente Renati Descartes more scholastico breviter digesta (Londres, 1671), revised and expanded in his opus magnum, the Institutio Philosophiae, secundum principia Domini Renati Descartes. Nova methodo adornata et explicata. In usum juventutis academicae (London, 1672, and many later editions). This work enjoyed a tremendous success, principally at Cambridge (according to Wood), and was re-published several times in London, Geneva and Nuremberg. Le Grand completed his course in Cartesian philosophy in 1673 by publishing a Historia naturae, variis experimentis et ratiociniis elucidata, suivie en 1675 d'une Dissertatio de carentia sensus et cogitationis in brutis. An English translation of the three volumes, presenting his whole system of philosophy appeared in London in 1694:8

⁴ J. H. Sbaralea-Luke Wadding, Supplementum et castigatio ad Scriptores trium ordinum S. Francesci... Rome, 1908 (reprinted. 1978), pars I, p. 80. See Arrigo Pacchi in the new Überweg, Grundriß der Geschichte der Philosophie, XVII. Jh. p.p. J.-P. Schobinger, volume 3/1, Basle, 1988, pp. 298–301 et 309, supplemented by the Dictionary of National Biography, vol. 32 (1892), pp. 421–422 (Thompson Cooper).

⁵ (Anonymous), Les Caractères de l'Homme sans passions, selon les sentiments de Sénèque, Paris, 1663, 1682 and Lyons, 1665.

⁶ The *Physica* (Amsterdam, 1664) that is mentioned by several bibliographers remains lost.

⁷ The Breakdown of Cartesian Metaphysics, Atlantic Highlands, N.J., Humanities Press International, 1987; see also the article of Grene, Marjorie, "Aristotelico-Cartesian Themes in Natural Philosophy: Some Seventeenth-Century Cases", Perspectives on Science, 1993, 1, 1, pp. 66–87.

⁸ Watson, Richard A., "Introduction" to Legrand, Antoine, An entire body of philosophy, according to the Principles of the famous Renate Des Cartes, in three books (London, 1694), New York, Johnson Reprint Corporation, 1972, v-xii.

An Entire Body of Philosophy, according to the principles of the famous Renate Des Cartes, in three books, I. The institution . . .; II. The history of nature . . .; III. A dissertation of the want of sense. . . .

His unambiguous and provocative Cartesianism embroiled Le Grand in lively debates with Samuel Parker (1640-88)9 and John Sergeant (1622-1707), 10 which led to an Apologia pro Renato Des-Cartes (1679) and to a Dissertatio de ratione cognoscendi . . . cum castigationibus errorum, calumniarum, praevaricationum, quibus John] S[ergeant] in duobus libris quorum prior Methodus sciendi, alter Solida philosophia intitulatur, Cartesium, Malebranchium, ideistas, quos vocat, omnes, immo et Aristoteles, si non Deum ipsum, multa cum futilitate, nec minore fastu, nuperrime adortus est (1698). Meanwhile, Le Grand had copiously annotated Rohault's Physique (London, 1682) and Amsterdam, 1691). Le Grand's Animadversiones, spread throughout Rohault's text, were published separately in the edition of this work that Samuel Clarke procured in Amsterdam in 1708 (re-printed in Cologne, 1713). Le Grand was also the author of a Curiosus rerum abditarum naturaeque arcanorum perscrutator (Nuremberg and Frankfurt, 1681 with a German translation, 1682) and of two historical treatises (a Historia sacra of the origins of the world, in Constantinople, London, 1685, and a Historia Haeresiarcharum of the whole history of Christianity, which appeared posthumously in Douai in 1729).11

The enormous success of the course in philosophy is evidenced by the different editions, the English translation, and its presence among the old-book collections in many libraries. Such a work in usum juventutis academicae could not have failed to attract the attention of its author's enemies, or to lead to a denunciation by the Holy Office, which in fact happened in 1706. The condemnation was not immediate. As for all important publications, the Congregation appointed two successive experts seriatim and allowed them sufficient time to examine the work. The Congregation was in no hurry; with the author dead since 1699, it was purely a doctrinal problem. In these cases, the Congregation always took the time necessary to avoid a mistaken, too-hasty condemnation of authors who might be read as orthodox, but who were denounced by accusers who were themselves

⁹ Author of three-volume Disputationes de Deo, et Providentia Divina. Disp.1a: "an Philosophorum ulli, et quinam Athei fuerunt." London, 1678.

¹⁰ Author of Ideae Cartesianae ad Lydium veritatis lapidem (terminorm scillicet connexionem) expensae..., 1698.

¹¹ Also to be found in his bibliography is the Missae Sacrificium neomystis succincte expositum, London, 1695.

suspect. The investigations that I shall describe took three years, between the opening of the case by the Congregation at the end of 1706 and the condemnation that concluded it in 1709.

The documents to which I have access in the Archives of the Congregation for the Propagation of the Faith (ACPF) are of several sorts. In the present case, we have, as is often the case, notes of the secretary of the Congregation (in Italian) and the official transcript (in Latin, often based on the secretary's notes).

The oldest document is a note dated 7 November 1706,¹² which reads:

the secretary must bring an accusation before Congregation against the book entitled *Antonii Legrand Institutio philosophiae...Londres 1678.*¹³

In accordance with this note, the following reference is to be found in the *Diarii*, which are the minutes of the Congregation's meetings:

a charge was laid against a book entitled Antonii Legrand Institutio philosophiae nova methodo adornata, printed in London in 1678. The Eminent Lords [Cardinals] ordered that it be given up to examination.¹⁴

After the decision to examine the work, the next step was the appointment of a first censor, the choice of whom was left, as was often the case, to the secretary: "The Eminent Lords ordered that the examination be carried out by someone chosen by the secretary." The secretary entrusted the work to the Reformed Franciscan Nicolas de Rossiglione, who rendered his verdict at the end of 1708, twenty months later. I have succeeded in finding the transcript from 3 December 1708:

¹² Fo. 296r Folium eorum quae agenda sunt in Congregatione 1701 (dated 7 Nov 1706); a marginal note reads: Actis fo. 1666 A.

^{13 &}quot;deve il segretario accusar il libro intitolato Antonii Legrand Institutio philosophiae . . . Londini 1678". The Italian term accusar (like the Latin accusare) means 'to bring an accusation before the Congregation.'

¹⁴ Accusatus fuit liber quidam inscriptus Antonii Legrand Institutio philosophiae nova methodo adornata, typis mandatis Londini Anno 1678. Em[inentissim]i. D[omi]ni. eum referri manderunt", ACDF, Diarii XIII, fo [modern] 118v (= page 1666) 17 January 1707; marginal notes refer to vol. Prot. A4 and to Diarii XIV, fo 1722 et fo 1732. This information is corroborated by a note (in Italian): "ha accusato il libro intitolato Antonii Legrand Institutiones phiae... La Congregazione ordina che referasse" (fo 299).

^{15 &}quot;Emmi. Dni. jussunt referri ab aliquo ad electionem secretarii", fo 309v (7 janv 1707).

¹⁶ I have found his votum in the ACDF: Prot A4 aux fos. 297-302.

Nicolas de Rossiglione, Reformed Franciscan, gave an initial verdict on the book entitled Antonii Legrand *Insitutio philosophica secundum principia D. Renati Descartes*. After this verdict, the Eminent Lords ordered that it be entrusted to a second investigator.¹⁷

This procedure was quite normal, with works being entrusted to two investigators in turn, each belonging to a different religious order, with the second not knowing the identity of the first. The secretary thus found a second censor, Venance de la Sainte-Trinité, former provincial of the Discalced Carmelites, who rendered his opinion five months later.¹⁸

Venance de la Sainte-Trinité, former provincial of the the Discalced Carmelites, reviewed for the second time the book entitled Antonii Legrand Institutio philosophica secundum principia D. Renati Descartes. 19

After reading the second verdict, the Congregation of the Holy Office delivered a sentence banning the work ("the Eminent Lords have ordered that this book be banned.")²⁰ The decree of of condemnation was published by the Holy Office on 13 May 1709, and was transmitted to the Congregation of the Index for execution. Another action, taken against the *Apologia pro Renato Descartes* (London, 1679) ended with a condemnation on 24 April 1719. The two condemned works remained on the *Idex of forbidden books* until the end of the index itself. They are to be found in the last catalogue, that of 1948.²¹

I have had the good fortune to find the text of the two censures imposed on Le Grand's *Institutio*.²² Examining these texts allows us to read the content of the Cartesianism expounded by Le Grand through the eyes of two experts in scholastic philosophy. They highlight the innovations, evaluate them, discuss them, take note of their dangerous features for this or that Catholic dogma.

¹⁷ R.P. Fr. Nicolaus à Rossiglione min. ref. pro p^a vice sermonem habuit de libro cui titulus: Antonii Legrand *Institutio philosophica secundum principia D. Renati Descartes*. Emi. Dni. habita suprad. libri relatione illum alteri referendum tradidere", *Diarii* XIV, f^o [modern] 4v or [ancient] p. 1722.

¹⁸ I have also found the *votum* of Venance de la Sainte-Trinité in th ACDF: Prot A4, fos. 358-362.

¹⁹ "R.P. Fr. Venantius a Ssma. Trinitate exprov[incia]lis. Carmelitan. Discalceatorum pro 2a vice adaperuit librum sic inscriptum: Antonii Legrand *Institutio philosophica secundum principia D. Renati Descartes.*"

²⁰ Emi. Dni. hunc quoqu. librum prohiberi iusserunt" *Diarii* XIV, f° 1732 (modern 9v), 13 mai 1709.

²¹ Index librorum prohibitorum SS. D. N. Pii PP. XII jussu editus, Rome, 1948, p. 264. ²² That of Rossiglione dans Prot A4, fos. 297–302, and that of Venantius of the Holy Trinity in the same dossier, fos. 358–362.

The Franciscan Nicolas de Rossiglione began his censure with the famous text from the end of Descartes's *Principia* (207: *nihil ab ullo credi velim, nisiquod ipsi euidens & inuicta ratio persuadebit* ["I would not wish anyone to belive anything except what he is convinced of by evident and irrefutable reasoning."]²³ which Le Grand had inserted below the inscription on the title page of his work. This sentence is clearly identified as a claim of intellectual autonomy, "the author prefering the precepts of Descartes to those of the Most High." He then explains that great care should be taken in reading the disciples of Descartes, citing two letters of Descartes to Regius in which the master counsels the disciple to prudence and dissimulation.²⁴

The censor extracted eight propositions from Le Grand's book, presenting them as a fully formed and coherent philosophical discourse, from methodic doubt to the existence of God and of the external world.

1. The human mind can and must doubt everything, except that it thinks and therefore that it exists.²⁵

Rossiglione here discusses the necessity of methodic doubt; he finds it excessive, deriving from skeptical roots and tending to discredit all forms of knowledge, even that of the truths of faith, and especially so for students. This is a fairly common criticism of Cartesian doubt, which was suspected of being a permanent universal doubt—in other words, a skeptical doubt. The censor was quite familiar with the objection (it is a matter less of doubting than of seeking the truth) and he responded to it as follows: the task of philosophy as defined by the fifth Lateran Council calls for the founding of certainty, not the generating of doubt.²⁶ The censors in Rome of Descartes's *Works* had already raised this point: if all certainty depends on the *cogito*, then the assent that defines faith itself depends on it.²⁷

(Paris, 1994) vol. 2*, p. 605.

²³ CSM I, 291.

 $^{^{24}}$ Letters 89 and 98 of vol. 1 of the Clerselier edition (1657), AT III, 491 and X, 256.

²⁵ Mens humana de omnibus dubitare potest ac debet, praeterquam cogitet adeoque existat. ²⁶ Eighth session 19 December 1513. Les conciles oecumeniques, ed. Guissepe Alberigo

Tartaglia, one of the two censors of Descartes, put it this way: "All certainty of faith begins with this first principle, I am a thinking thing, and thus the assent of faith cannot be cannot be any surer than this human assent, concerning which many things can be doubted."

2. Before knowing with certainty the existence of God, our understanding can and must always doubt whether it has been endowed with a nature such that it errs in all its judgments, even in what seems to it most certain and evident.²⁸

Here again it is the Cartesian construction of certainty based on the existence of God that is called into question.²⁹ For the censor, this proposition affronts the divinity and can lead young people to atheism.

3. There are no material or substantial forms in body.³⁰

Descartes never speaks of "material forms" [formae materiales]; rather, the adjective is the epithet of res [thing].³¹ In its censure, the Louvain Faculty of Theology had at length developed this point, which is frequently found among the complaints made against Cartesianism, with the risks it presented for the physical explanation of the Eucharist.³²

4. I cannot understand why the Aristotelians strive so mightily to introduce accidents into the world, although if there were any such, they would be perceptible to none of the senses.³³

This claim, according to the censor, can be given an accceptable meaning depending on the context, but it fundamentally smacks of heresy, for it transforms the Eucharistic accidents into an illusion.

²⁸ Mens nostra ante certam notitiam divinae existentiae dubitare semper potest, ac debet, annon talis naturae quis conditus fuerit ut in omni iudicio suo fallatur, etiam in iis quae certissima sunt ac evidentissima ipsi apparent.

²⁹ In *Meditations* \dot{V} Descartes wrote: "in spite of still remembering that that I perceive it very clearly, I can easily fall into doubt about its truth, if I am without knowledge of God. For I can convince myself that I have a natural disposition to go wrong from time to time in matters which I perceive as evidently as can be. This will seem even more likely when I remember that there have been frequent cases where I have regarded things as true and certain, but have later been led by other arguments to judge them to be false." CSM II, 48.

³⁰ Nullae dantur formae materiales, seu substantiales in corpore.

³¹ In the letter to Dinet, Descartes writes: "Misera illa entia (scilicet formas substantiales, & qualitates reales) nullius plane usus esse perspeximus, nisi forte ad excoecanda studiosorum ingenia, & ipsis in locum doctae illius ignorantiae, quam tantopere commendas, fastosam quandam aliam ignorantiam obtrudendam. AT VII, 592. ["These miserable entities (i.e. the substantial forms and real qualities) are clearly not of any use at all, unless to blind the eyes of those who study, and bring it to pass that in place of this learned ignorance that you so commend, another and haughty sort of ignorance will be obtruded." HR II, 367–68.]

³² See the deliberation of the Louvain Faculty of Theology, 7 September 1662.
³³ Adhuc percipere non potui quare Aristotelici tanto conatu accidentia in mundum introducerent, cum si talia darentur, a nullo sensu percipi possent.

In this regard he cites the condemnation of Wycliffe at the Council of Constance.³⁴

5. God is the principle of all motion in the world.35

The issue here is the principle set out by Descartes in *Principia* II, 36: "God is the primary cause of motion; and he always preserves the same quantity of motion in the universe." The censor interprets this claim as attributing motion to God, and as having Him intervene as a secondary cause in the world.

6. There is no void in the absence of some thing.³⁷

In relating this thesis to the sixth Meditation,³⁸ the censor emphasizes that he is not opposed to the philosophical principle denying the void, but only to a general attitude of doubt and rejection of tradition. This error, he says, was originally that of Anaxagoras, repeated by the Pythagoreans, the Platonists, the Stoics and the gnostic Christians. Le Grand tries to avoid condemnation by resorting to a subterfuge, that of affirming that the world is not infinite, but indefinite. Without seeming to understand the distinction, the censor asserts that this is playing with words and hiding the doctrine of an infinite world.

7. The earth is humbled by the celestial matter surrounding it on every side and penetrating all its parts; the sun is stuated at the center of a vortex, as if unmoved at the center of the world, like a prince seated on his royal throne.³⁹

The issue here is a Copernican proposition; one of the Descartes's censors in 1663, Spinula, had raised it with respect to *Principia* III,

³⁴ At its eighth session the Council of Constance (1214) had condemned the following proposition of Wycliffe: "accidentia panis non manet sine sujecto in eodem sacremento" [the accidents of bread do not remain without subject in this sacrament] prop.2 in Mansi, *Collectio...*, (Venice: 1784) vol. 27. Col. 632.

³⁵ Deum omnis motus qui in mundo est esse principium.

³⁶ "Deum esse primariam motus causam: et eandem semper motus quantitatem in universo conservare." AT VIII-1, 61.

³⁷ Repugnat dari vacuum in quo nulla sit res.

³⁸ "Nihil unquam ab illo fieri non posse judicavi, nisi propter hoc quod illud a me distincte percipi repugnaret" (*Meditationes de prima philosophia*, AT VII, 71). ["I have never judged that something could not be made by him except on the grounds that there would be a contradiction in my perceiving it distinctly." CSM II, 50.]

³⁹ Terra a materia caelesti circum ambiente, et omnes eius partes peruadente defertur; Sol in magno vorticis medio constituitur tamquam in mundi centro immotus, et veluti Princeps in regali throno insidens.

13.40 The author of the censure draws attention to the condemnation of Galileo and of Copernicus's system.

8. Living creatures, with the exception of man, are like certain clocks or automata, that is, machines, and everything that occurs in living creatures is caused by mere body, and no sensitive soul need be supposed in them.⁴¹

The censors of Descartes in 1663 took no notice of the thesis of the bete-machine, but Nicolas de Rossiglione was astonished at the novelty of the view, which appears nowhere in Scripture. He goes on to rehearse various views of the Cartesians: the rational soul is located in the pineal gland (a view, he says, that was refuted by Galen), it is defined as res cogitans [a thinking thing] and exists only because it thinks (with the result that children in the womb of their mothers think, even if they retain no memory of it).

The second censor, Venance de la Sainte-Trinité, belonged to the same order as one of the two censors of Descartes, Jean-Augustin de la Nativité (Tartaglia). His discussion was not as detailed as that of the first censor. Instead, he reduced Le Grand's theses (as well as those of Descartes, whom he cites) to the three main points:

First, corporeal substance is not distinct from quantity, and thus cannot be separated from it, in addition to which [Descartes] rejects all accidents in the same part of article nine,⁴² and allows modes only through

⁴⁰ First condemnation, p. 110.

⁴¹ Animalia, si homo excipiatur, sunt veluti quaedam Horologia aut alia automata, hoc est Machinae, omnia quae in animalibus fiunt, solidum corpus pro causa agnoscunt, nec ulla in eis anima sensitiua fingenda.

 $^{^{42}}$ 9. Substantiam corpoream, cum a quantitate sua distinguitur, confuse concipi tanquam incorpoream.

Et quamvis forte nonnulli aliud dicant, non puto tamen ipsos aliud ea de re percipere; sed cum substantiam ab extensione aut quantitate distinguunt, vel nihil per nomen substantiæ intelligunt, vel confusam tantum substantiæ incorporeæ ideam habent, quam falso tribuunt corporeæ, hujusque substantiæ corporeæ veram ideam extensioni relinquunt, quam tamen accidens vocant, atque ita plane aliud efferunt verbis, quam mente comprehendunt", Descartes, Principia Philosophiæ, II, 9, AT VIIIa, p. 45. [If corporeal substance is distinguished from its quantity, it is conceived in a confused manner as something incorporeal. Others may disagree, but I do not have any alternative perception of the matter. When they make a distinction between substance and extension or quantity, either they do not understand anything by the term 'substance,' or else they simply have a confused idea of incorporeal substance, which they attach to corporeal substance; and they relegate the true idea of corporeal substance to the category of extension, which, however, they term an accident. There is thus no correspondence between their verbal expression and what they grasp in their minds." CSM I, 226–27.]

the various combinations by which they distinguish bodies from each other, and he says of modes that they are inseparable from body,⁴³ such that even separated by divine power they cannot exist without body."⁴⁴

The consequence of identifying substance and res extensa is immediately drawn by the censor: this doctrine makes Eucharistic transubstantiation if not impossible to explain, then at least difficult to state in accordance with the Council of Trent's definition. On this first point the censor seems to be uneasy over a new explanation and adheres to a pedagogical type of criticism (the weakness of the explanation in accounting for the mystery).

"Secondly, he denies all substantial forms. He would have it that corporeal forms are distinguished from each other by different modes, since they are nothing but the simple matter at the boundary of substance."

In this regard the censor draws attention to the letter of the Roman Inquisition denying authorisation to works that reject corporeal forms and accidents. This is the letter circulated on 2 October 1673, directed against atomism and often employed in anti-cartesian debates. It had been written, in Italian, to the apostolic nuncios in areas controled by the Roman Inquistion:

should you happen to have a book to be given over for printing that contains the following, composita substantialia non componi ex materia et forma, sed ex corpusculis, seu atomis [the substantial compound is put together not from matter and form, but from corpuscles or atoms], you should expressly prohibit its publication, the spirit of these books being such that I am forced to command that my order be precisely carried out.⁴⁶

It should be emphasized here that the issue is not a doctrinal decision, but a disciplinay procedure directed at the sale of books. Such a measure could not have been applied except in the geographical region in which the Roman Inquisition was accepted, i.e. roughly in the Papal States.⁴⁷

⁴³ Principia I, 64.

⁴⁴ Primum: substantia corporea non distinguitur a quantitate, adeoque neque ab ea potest separari, iuncto praesertim quod eadem parte art. 9 negat omnia accidentia, solosque modos admisit per quorum diversas combinationes corpora distinguit ab invicem, quos et ait omine inseparabiles a corpore, ita quod etiam divinitus separatos a corpore existere posse non admittitur.

⁴⁵ Secundum: negat omnes formas substantiales. Vult enim, quod formae corporeae per diversos modos inter se distinguantur, cum non sint nisi simplex materia in linea substantiae.

⁴⁶ There are several examples in the ACDF; reproduced here is a copy found in Prot v4 fol. 415r in 1717, concerning the affair of the Minim Maignan.

⁴⁷ From the replies of the inquisitors the geographical limits of the operation can be drawn (listed here in chronological order of the the replies): Milan, Belluno, Pisa, Siena, Reggio, Bologna, Modena, Piacenza, Padua, Mantua, Parma, Peruggia, Avignon, Alessandria, Asti, Saluzzo.

This measure is of interest under two rubrics: on the one hand, it was to be invoked to justify the doctrinal condemnation of atomism and to renew the condemnation of Descartes; on the other, it demonstrated the very weakness of such a condemnation, which was obtained without any theological judgment and was thus enforced as part of a regulatory measure prohibiting the publication of books containing these theses. Neither the rest of the doctrine nor the dissemination of the mansuscript was thereby prohibited.

Thirdly, that which should all the more condemn the book, but which has already been condemned, is that it adheres to the system of Copernicus, Galileo and their disciples.⁴⁸

Here again, for failure to stake out a doctrinal position, the censor uses a prior disciplinary decision to justify the later prohibition of the book.

The second censure has several traits in common with the repeated criticisms of Cartesianism, such as those based on the *Principia* in 1663 by one of the first two censors of Descartes, the redoubtable Spinola: they relate to the denial of substantial forms and real accidents, the identification of matter and extension, and cosmology.

By contrast to the censure of Descartes's work, that of Le Grand intially appears as philosophically less structured. The charges raised are more general, with little metaphysical content. The main arguments turn on the issues of doubt (for Rossiglone) and cosmology (for Venance de la Sainte-Trinité). This narrowing of Cartesian doctrine reflects a certain reality: what draws attention in Le Grand is less the originality of his positions,⁴⁹ than the anti-scholastic arguments taken over from Descartes.

Right from the title of his work, Le Grand had indicated his objective: to give a course in philosophy for the instruction of young people, i.e. a work that was truly an *Institutio philosophiae...in usum Juventutis Academicae*. The Roman censors took it literally twice over: their rudimentary critiques were directed at a rudimentary and fragmentary exposition of a narrowed Cartesian doctrine; they are severe in so far as they aim at correcting a textbook designed for students, in usum Juventutis Academicae. Le Grand and his censors nicely testify to the breakdown of Cartesian metaphysics studied by Richard A. Watson.

⁴⁸ Tertium: quod nedum damnandum, sed iam diu damnatum, constituit librum, est quod adhaeret sistemati Copernici, Galilei, et seguacium.

⁴⁹ See the account by Richard A. Watson, *The Breakdown of Cartesian Metaphysics* (Indianapolis: Hackett, 1987), pp. 93–96.

FREEDOM TO PHILOSOPHIZE: SOME PHILOSOPHICAL QUESTIONS ABOUT SCIENCE, THEOLOGY, AND STATE IN THE SEVENTEENTH CENTURY

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Red Watson's new biography of Descartes, Cogito, Ergo Sum² teaches us a great deal not only about Descartes, but about the general conditions in which philosophy was practiced in the first half of the seventeenth century. One of Watson's themes is the difficulty of doing philosophy within a society in which the church exercises considerable control over what can be published and attempts to exercise control over what can be thought. It is to escape the repressive atmosphere of "royalist Catholic totalitarian oppression" that Watson claims Descartes left for the Low Countries in the late 1620s.³ This, of course, was not entirely successful. Later in the biography Watson discusses in delicious detail the trouble that Descartes got into with Calvinist zealots in his new home.⁴ In this paper I would like to explore this theme in a more general way.

A central goal of the history of philosophy is to explain to us why smart people held views that we now find so strange and uncongenial, to try to understand what the philosophical world looked like to our philosophical ancestors. In this paper I would like to explore an issue in seventeenth-century philosophy that we now find relatively unproblematic: the question of the freedom to philosophize, the freedom to formulate, hold, and express the philosophical views that we think are correct. This freedom seems to us to be an obvious good, something that is beyond question. But this wasn't always

¹ Earlier versions of this paper were given at the University of California, Irvine, Northern Illinois University, the New Europe College (Bucharest, Romania), and to Pierre-François Moreau's Spinoza seminar at the École Normale Supérieure (Lettres) (Lyon, France). I would like to thank audiences at all of those places for their helpful comments. I would especially like to thank Red Watson, whose grumpy criticisms have always been a source of constant inspiration. Honest.

² Boston: David Godine, 2002.

³ Watson, Cogito, Ergo Sum, p. 153; see also chapt. VI passim.

⁺ Ibid., chapt. XI.

so. In the seventeenth century, the freedom of thought and expression for philosophers and for scientists (the distinction wasn't made during the period) was a very important issue to articulate and to defend. In this paper I would like to explore what their views were, and why it was such a difficult argument to make.

In order to do this, though, I am going to begin by exploring the arguments against freedom to philosophize. Intellectual repression has not had a very good name, at least not for the last couple of centuries. I do not intend to rehabilitate the idea. But as an historian of philosophy, I would like to try to understand why apparently rational people might find it not only attractive, but obligatory. In particular, I would like to begin by exploring the views of Marin Mersenne. While usually known as a friend of Descartes and one of the central people in the new philosophy of the seventeenth century, he was also known for his extremely repressive views about freedom of expression. After we understand why someone such as Mersenne held such views, I would like to turn to some arguments given by Bacon, Descartes, and Spinoza. Sympathetic as we might be to their conclusions, I will argue that they don't really answer Mersenne's worries, a conclusion that I frankly find somewhat disturbing.

MERSENNE.

Mersenne is best known today in philosophical circles as a friend and correspondent of Descartes'. But he was much more than that. In the 1630s and 1640s, Mersenne was known as a mathematician and mechanical scientist, the author of the seminal *Harmonie Universelle*, where he attempted to bring Galilean science to bear on the science of accoustics. In his rooms at the Minim convent, Mersenne met regularly with others inclined toward the new science, including Gassendi, Hobbes, Roberval, the Pascals, and when he was in Paris, Descartes. He corresponded with learned Europe, and enabled knowledge and information to travel between like-minded correspondents, copying the letters he received and sending them to other interested parties. He translated Galileo's writings and published them, even after he had been officially condemned.⁵ It is thus somewhat sur-

⁵ For a general account of Mersenne, see Robert Lenoble, *Mersenne ou la naissance du mécanisme*, 2nd ed. (Paris: Vrin, 1971). Originally published in 1943, this is still an

prising to find quite a different and more conservative Mersenne earlier in his writings in the 1620s.

The book I would like to discuss is called La vérité des sciences, and was published in Paris in 1625. The book is a dialogue among three characters: the Christian philosopher, the alchemist, and the sceptic. The project of the book is a a defense of the Christian philosophy against alchemy and scepticism. By the Christian philosophy, Mersenne means, so far as I can see, something like the Aristotelian philosophy of the schools. I say "something like" here because Mersenne was critical of Aristotelianism in the book, and, as we shall see, was quite clear that he did not accept everything that Aristotle held. His Aristotelian philosophy was an Aristotelianism blended with Christianity, the kind of Christian/Aristotelian synthesis that had come to dominate the schools after the thirteenth century. Alchemy and scepticism were, from Mersenne's point of view, the main alternatives to the Christian philosophy in the period, and he was out to refute them. (It should be noted here that what came to be called the mechanical philosophy did not really exist at this time, at least not as a coherent and organized program. Though it was later to become the most formidable alternative to Aristotelianism, it wasn't in 1625.)

In La vérité, Mersenne discusses a very important event, the disputation of 1624.⁶ There is not space to go into any depth on this very interesting incident here, but it is important to understanding the context of Mersenne's remarks. In late August 1624, a group of three disputants (whom I shall call the Gang of Three) put up posters inviting people to a public disputation. On those posters were fourteen anti-Aristotelian theses, mainly against the Aristotelian physics of matter and form and in favor of an atomist conception of physics. The posters announced a public forum in which the Gang of Three claimed that they were going to defend those theses and refute Aristotle. Close to a thousand people gathered at the chosen site, the palace of the late Queen Marguerite, the late ex-wife of the assassinated

essential work. But see also Peter Dear, Mersenne and the Learning of the Schools (Ithaca: Cornell University Press, 1988).

⁶ For a fuller account of the affair and its larger context, including Mersenne's reaction to it, see Daniel Garber, "Defending Aristotle/Defending Society in Early Seventeenth-Century Paris," in *Ideal and Culture of Knowledge in Early Modern Europe: Concepts, Methods, Historical Conditions, and Social Impact*, ed. Claus Zittel and Wolfgang Detel (Berlin: Akademie-Verlag, 2002). The full references are given there. This section is largely drawn from that essay.

king Henri IV. However, the Parlement of Paris got wind of the event, and before it happened, prevented the Gang of Three from holding it. After the crowd dispursed, the Gang of Three were arrested, tried, and, with advice from the Faculty of Theology of the University of Paris (the so-called Sorbonne), sentenced to banishment from Paris, on pain of corporal punishment. As a consequence of the deliberations, the Parlement declared formally that it was forbidden to speak against the approved authors, particularly Aristotle.⁷

But be that as it may, what interests me here is Mersenne's reaction to this case. In *La vérité*, Mersenne gives a moderately detailed account of the whole case. Mersenne was completely in agreement with the judgment. About the denial of matter and form, he wrote:

It is very easy to overturn all of these opinions, and I find it astonishing that they were so bold as to advance these propositions in a Christian city, since if there is neither form nor matter, man has neither a body nor a soul, which is contrary to the beliefs of the Catholic faith.⁸

About another of their anti-Aristotelian claims, Mersenne wrote that their views are "so impertinent that there isn't any need to refute them." Thus, insofar as their views are false and inconsistent with the Catholic faith, they should be rejected.

Mersenne's view here is a bit more complicated than this would suggest, though. Mersenne does not believe that Aristotle's philosophy is completely correct. Later on in *La vérité*, Mersenne goes through a long catalogue of errors that he has found in the philosophy of Aristotle.¹⁰ But, nevertheless, Mersenne argues that Aristotle is the best we have at this point. In a famous line, he asserts that "Aristotle is an eagle in philosophy. The others are only chicks, who want to fly before they have wings." Furthermore, the fact that Aristotle's philosophy has proved itself to be safe for society is reason enough to prefer it to the alternatives on the table. Responding to the Alchemist, Mersenne's Christian philosopher writes:

⁷ This legal judgment was historically very significant. It was used fifty years later to justify condemning the Cartesians at the Université d'Angers in another celebrated case. On this see Roger Ariew, "Quelques condamnations du cartésianisme: 1662–1706", introductory essay in *Bulletin Cartésien XXII*, *Archives de philosophie*, 57 (1994).

⁸ La vérité, p. 81.

⁹ La vérité, p. 82.

¹⁰ See La vérité, pp. 119ff.

¹¹ La vérité, pp. 109-10.

I... beg Monsieur the Alchemist to give up his mistakes, and rather embrace the doctrine of Aristotle, which has been received and cultivated for such a long time by so many strong minds and learned persons.... Even though I don't consider the doctrine of Aristotle to be true, it is so much more probable, and seems to be more appropriate for human preservation, for maintaining public order [la police], and for common usage, than are your extravagant opinions....¹²

Since Aristotle has already been rendered safe by long custom, and rendered consistent with religious faith, we should stick to him, even if he isn't entirely correct.

But things get even more interesting still. The Alchemist, responding to the Christian Philosopher's attack, attempts to formulate an argument for the freedom of philosophizing. To Mersenne's worries about the inconsistency of some of these new anti-Aristotelian doctrines and the Catholic faith, the Alchemist argues that scientific truth can never contradict religious truth: there is *one* truth, religious and scientific, and it is consistent. As the Alchemist puts it to the Christian Philosopher, "no truth is inconsistent with the Catholic Faith." He goes on to say that:

I don't believe that a Christian should subject his mind to the doctrine and opinions of a Plato or an Aristotle to such an extent that he cannot depart from it whenever he can bring up a contrary instance or he has some experiences which can only be explained if he follows a different opinion than that of these gentlemen....¹⁴

Finally, the Alchemist brings up the most embarrassing case for the Christian Philosopher's defense of Aristotle and his condemnation of the Gang of Three. The Alchemist remarks to the Christian Philosopher that the philosophy of Aristotle had itself been condemned by the Church at one time. The Alchemist brings up a condemnation in Paris in 1209; actually, unbeknownst to Mersenne and his contemporaries, it had been condemned numerous times in Paris in the thirteenth century.) And if the Church can depart from Aristotelian doctrine, than so can others, it would seem. Mersenne's response is very interesting:

The prelates and doctors could have prohibited the reading of these books for a time, having perceived that they were badly used and that

¹² *La vérité*, p. 84.

¹³ *La vérité*, p. 101.

¹⁴ La vérité, pp. 101-2.

¹⁵ *La vérité*, p. 97.

this doctrine, which was not yet well understood, was being used to destroy the Catholic faith.... That is why the church, the bishops and doctors, can suppress, prohibit, or condemn all the books that the heretics use in order to attack the faith, as they judge necessary, for a time or for always, for they have the right to do everything required for the preservation of the church and the souls that God has put into its hands for their welfare. 16

Mersenne continues:

This allows me to conclude that just as the king can justly prohibit card, dice, and chess games, tennis, deer and hare hunting, the hunting of other creatures, and the like, if he deems these prohibitions are necessary in order to maintain his kingdom, and to prevent debaucheries and the abuses committed at these games and at the hunt, ... in the same way, the prelates and pastors of the church can prohibit the reading of books that heretics and the other enemies of the church use to upset our belief, even though these books do not contain anything false. For example, if some new heresy based on Euclid's Elements or Aristotle's Physics or Logic arose to fight the Catholic faith, and the supreme pontiff and other prelates judged that it would be appropriate to remove these books from the hands of Christians, for fear that they would be dissuaded from their faith by the subtleness of the heretics' sophisms and paralogisms, they could prohibit the reading of these books until they saw the danger passed and the poison of the heresy destroyed.... This should impose a perpetual silence on the heretics and libertines who attempt everyday to slander the prelates of the church and the general councils for their prohibition of the reading of censured books and of the Bible in the vernacular, for fear that those who do not have well-formed minds or firm enough judgment, such as the ignorant and women, may run the risk of losing their faith after having read things they did not understand. . . . 17

Against the Alchemist in the dialogue, arguing for the freedom to philosophize, and to publish the results of that free philosophizing, Mersenne argues that it is in the interests of the Church and the state to control what people think and publish. Ultimately, it is up to the Church (and the state) to make sure that weak minds don't get misled into giving up their faith. For Mersenne and his like-minded contemporaries, belief is not a question of conscience, but of politics: it is up to the authorities to decide what people should be exposed

¹⁶ La vérité, p. 111, translated by Roger Ariew in R. Ariew, J. Cottingham, and T. Sorell, Descartes' Meditations: Background source materials (Cambridge: Cambridge University Press, 1998), p. 164.

¹⁷ La vérité, pp. 111-13, trans. by Ariew in Descartes' Meditations, pp. 164-5.

to and what they are better protected from. If Euclid or even the Bible are being used to undermine people's faith, then these should be controlled as well, even if they are true!

It is obvious here why the Church should be interested in preventing heresy, but why should the state be involved, as it was in the case of the Gang of Three and the disputation of 1624? The story is complicated, and I can only suggest it here.¹⁸

There are some very special reasons why people were suspicious of new ideas and heterodox opinions in France in the 1620s, on the eve of the Scientific Revolution. It must be remembered that the shadow of the religious wars of sixteenth-century France still darkened Paris when the three bold disputants announced their program in August 1624 and when Mersenne published La vérité des sciences in 1625. Though there were skirmishes between Huguenots and Catholics from the early sixteenth century, an outright civil war between the two parties began in early 1562. Bloody wars and civic violence continued for more than thirty years, as armies led by royalty and nobility loval to the Catholic Church fought those who had adopted the Protestant faith. It is hard to overestimate the violence of these religious wars, and the viciousness of the hostility between the different sides. An extreme, but not atypical example of the kind of violence the dispute provoked can be found in the infamous St. Bartholomew's Day massacres of August 24-26, 1572. At the end of the three days of horror, roughly three thousand people lay dead.

The reign of Henri IV, starting in the early 1590s, was a respite from the violence and instability of the earlier part of the century. The religious wars were officially ended with the Edict of Nantes in April 1598, which established Catholicism as the official religion in France, while guaranteeing the Huguenots certain rights. Henri then set about rebuilding Paris and a country that had been torn apart by war. But on May 14, 1610, Henri was assasinated by a Catholic zealot in Paris, and political instability returned when the throne went to his nine-year-old son, Louis XIII. Stability had still not entirely returned in August 1624, when the three disputants announced their

¹⁸ Again, for the fuller account, see Garber, "Defending Aristotle/Defending Society." For a general history of the wars of religion in France, see Mack P. Holt, *The French Wars of Religion, 1562–1629* (Cambridge: Cambridge University Press, 1995). The relations between Catholics and Protestants in Paris is treated in Barbara B. Diefendorf, *Beneath the Cross: Catholics and Huguenots in Sixteenth-Century Paris* (Oxford: Oxford University Press, 1991).

refutation of Aristotle, or a year later when Mersenne published his book. In the mid-1620s there were, no doubt, people still alive in Paris who had experienced the violence of St. Bartholomew's Day barely fifty years earlier.¹⁹

The historical experience of the wars of religion in the sixteenth century and the events that followed in the early seventeenth century led the members of the Parlement, the doctors of the Faculty of Theology, and thinkers like Mersenne to the inescapable conclusion that difference in belief breeds violence. A contemporary (and friend) of Mersenne, commenting on the disputation of 1624, remarked that false philosophical views, and the heresies they lead to might cause sects to be formed, sects "from which follow division and the ruin of provinces and whole kingdoms." In this context, the new anti-Aristotelian philosophies seemed every bit as dangerous to the public welfare as the heresies of Luther and Calvin. In these circumstances, it is no wonder that the freedom to philosophize was problematic. In an age in which intellectual innovation had led to such disastrous consequences, intellectual conservatism must have looked enormously attractive.

With Mersenne we have a case against the freedom to philosophize. At this point I would like to turn to three seventeenth-century defenders of freedom of thought, Bacon, Descartes, and Spinoza.

BACON

The New Atlantis, published posthumously, is one of Bacon's most charming and most popular works. It is the story of a group of English sailors, blown off course in the South Pacific, who land on a remarkable island, which its inhabitants call Bensalem. While guests of the benign Christian Commonwealth, they begin to learn of their remarkable civilization, including a number of their customs, their social and political organization, and their remarkable scientific establishment, Salomon's House.

¹⁹ The period following the death of Henri IV is treated in Victor L. Tapié, *La France de Louis XIII et de Richelieu* (Paris: Flammarion, 1967).

²⁰ Jean-Baptiste Morin, Refutation des theses erronées d'Anthoine Villon dit le soldat Philosophe, & Estienne de Claves Medecin Chymiste...ou sont doctement traictez les vrays principes des corps & plusieurs autres beaux poincts de la Nature; & prouvee la solidité de la Doctrine d'Aristote (Paris, 1624), intro, p. 5.

The description of Salomon's House is one of central features of the fable. Bacon describes it in loving detail. He talks about its organization, from those who collect observations and experiments from nature, from foreign countries, and from books, and arrange them into tables, to those who examine the tables for first theoretical conclusions, and those who devise and carry out new experiments based on those conclusions, to the "Interpreters of Nature" at the top, who "raise the former discoveries by experiments into greater observations, axioms, and aphorisms."21 Bacon also goes into exquisite detail about the numerous discoveries that the members of Salomon's House are supposed to have made, and the numerous technological marvels that they are supposed to have invented, including what we can now recognize as the telephone, the television, airplanes, genetic engineering of plants and animals, miracle drugs, and on, and on, and on. Salomon's House represents a science that is undogmatic, constantly searching for the way the world really is, a science that has relegated the idols of tradition and authority to the scrapheap. But Salomon's House was not Bacon's only interest in the New Atlantis. In his account of the place that Salomon's House occupies in the society of Bensalem, we can find a very important piece of the vision Bacon had for society.

Salomon's House was established by the legendary King Solamona [sic], who, according to the legend, ruled Bensalem nineteen hundred years before the story was to have taken place, placing him roughly three hundred years before Christ. Of all of Solamona's innovations, Salomon's House seems to have been the most important: it is described as "the noblest foundation (as we think) that ever was upon the earth, and the lanthorn of this kingdom." Bacon never tells us precisely how Salomon's House is integrated into the state, how precisely it is financed, how its members are appointed, what legal and social priviledges they enjoy. But it is clear that the society of Bensalem is one in which what we would call science is central. Its members have honor, priviledge, and wealth. It may be dangerous to extrapolate from what isn't in the fable, but given the attention Bacon gives to Salomon's House, it is interesting just how little attention he gives to the organization of religious practice in Bensalem. Indeed, according

²¹ Bacon, New Atlantis, in Brian Vickers, ed., Francis Bacon: A Critical Edition of the Major Works (Oxford: Oxford University Press, 1996), pp. 457-488, at pp. 486-7. ²² Ibid., p. 471.

to Bacon's story, it was one of the wise men of Salomon's House who received the Bible (Old Testament and New) and the word of Jesus's coming and brought them back for all to share, when a gigantic cross of light appeared off shore one night.²³ In a sense, Salomon's House has taken the place of the church and the monastery in Bacon's Bensalem.

In the New Atlantis, Bacon takes great pains to explain that the New Testament was given directly to the inhabitants of Bensalem, and that they are without question Christians. It is interesting, and significant here, that they received the Bible directly, and are thus not poluted by the accretions of Church Fathers and Church Councils: though Christians, the inhabitants of Bensalem are definitely not Roman Catholics! But perhaps even more significant is the fact that the Bible was given directly to a member of Salomon's House. The connection between Salomon's House and religion is not accidental; it is underscored in a number of ways. The charge of Salomon's House is filled with deeply pious goals: Salomon's House is "dedicated to the study of the Works and Creatures of God," charged with finding "the true nature of all things (whereby God might have the more glory in the workmanship of them, and men the more fruit in the use of them)."24 Even though Bacon's science may yield new truths, and does not respect authority, his point seems to be that it is perfectly well consistent with a very traditional conception of Christianity, grounded in the Bible and in respect for God. This theme is found in other aspects of the fable. One of the events witnessed by the European mariners is what Bacon called the "Feast of the Family", an elaborate ceremony to celebrate the father, the mother, and their offspring.²⁵ The Feast is obviously symbolic of the fruit that can be expected of the disciplined intercourse with nature that Bacon's experimental method can be expected to yield. But there is another point as well. The kind of science that Bacon outlines in the Instauratio Magna and the Novum Organum quite clearly sets itself against the traditional Aristotelianism of the schools. The Feast of the Family is intended at least in part, I think, to convince the reader that this new science, as embodied in Salomon's House, is quite consistent

²³ See *ibid.*, pp. 464-5.

²⁴ *Ibid.*, p. 471.

²⁵ *Ibid.*, pp. 472ff.

with a very conservative view of society. Indeed, that seems to be one of the central points of the entire New Atlantis: to show that the new science that he was proposing is entirely consistent with a very traditional, Christian society, one in which people live in complete harmony with one another. Indeed, there is much more harmony (and, perhaps, Christianity) in Bacon's Bensalem than there was in early seventeenth-century Europe! In this way, Bacon attempted to neutralize the political implications of his great instauration by showing that the new science that he had hoped to found was completely consistent with the Christian society in which he and his contemporaries lived. His point is that building Bensalem doesn't entail overturning the traditional values of a Christian society.²⁶

One can read the New Atlantis as a kind of argument for the freedom to philosophize, showing that the consequences of departing from the accepted ways of thinking about the world don't lead to social chaos, as people like Mersenne feared. But the argument of the New Atlantis does have its limitations. First of all, it isn't an argument as much as a representation, a kind of living tableau of how things might be in the world of the new science that Bacon envisages. One might object here, and rightly so, I think, that it is much easier to get the lion and the lamb to lie together peaceably on a canvas, when you are manipulating the image, than it is to get them to do so in real life. Secondly, it is important to realize here that if the New Atlantis is read as an argument for the freedom to philosophize, it is only an argument for the freedom to philosophize in the Baconian manner. That is, at best it shows that Bacon's new program for the sciences is consistent with a stable traditional society, not that any other might be. But, finally, while Bacon seems to be advocating the freedom for the members of the House of Salomon to investigate nature as they saw fit, it isn't clear at all that Bacon is advocating a real free exchange of ideas, that is freedom to express new ideas. In the New Atlantis, Bacon is clearly sensitive to the way in which the new philosophies can disturb society. The representative of Salomon's House tells the European mariners that:

²⁶ For a more general discussion of the relation between religion and science in Bacon's thought, see John Channing Briggs, "Bacon's Science and Religion," in Marku Peltonen, ed., *The Cambridge Companion to Bacon* (Cambridge: Cambridge University Press, 1996), pp. 172–199.

... we have consultations, which of the inventions and experiences which we have discovered shall be published, and which not: and take all an oath of secrecy, for the concealing of those which we think fit to keep secret: though some of those we do reveal sometimes to the state, and some not.²⁷

In this way one can say that there may be freedom within the walls of Salomon's House, there is no freedom to express what they have found. Salomon's House is, in a sense, a kind of secret society, as Bacon conceives of it. In a very deep way, I think, Bacon would agree with Mersenne about the possible dangers of free expression.

DESCARTES

Let's turn now to another contemporary of Mersenne's, René Descartes. Descartes' position is rather complicated, perhaps not altogether consistent. Descartes is aware that novelty in philosophy is not always good, and that it can lead weak minds to heresy and atheism, and that it can possibly destabilize the state. In the Letter to Dinet (1642) he writes:

Well-trodden and familiar pathways are always safer than new and unknown ones, and this maxim is particularly relevant because of theology. For the experience of many years has taught us that the traditional and common philosophy is consistent with theology, but it is uncertain whether this will be true of the new philosophy. For this reason some people maintain that the new philosophy should be prohibited and suppressed at the earliest opportunity, in case it should attract large numbers of inexperienced people who are avid for novelty, and thus gradually spread and gain momentum, disturbing the peace and tranquility of the Schools and the universities and even bringing new heresies into the Church.²⁸

But Descartes doesn't think that his own philosophy is problematic in this regard. First of all, he claims, he always avoids theological questions. Writing again in the letter to Dinet, he notes:

I have often declared that I have no desire to meddle in any theological disputes; and since, even in philosophy, I deal only with matters that are known very clearly by natural reason, these cannot be in conflict with anyone's theology...²⁹

²⁷ Bacon, New Atlantis, p. 487.

²⁸ AT VII 578. Translations of Descartes' writings are taken from CSM. Since CSM gives the citations to AT in the margins, I will not cite it separately.
²⁹ AT VII 598; cf. 429.

Indeed, he argues that his philosophy is so clearly true that it could not possibly lead to any disagreement at all:

Again, there is no need to fear that my opinions will disturb the peace of the Schools. On the contrary, philosophers already take sides against each other on so many controversies that they could hardly be more at war than they are now. Indeed, the best way of establishing peace between them, and curbing the heresies that spring up every day out of these debates, is to secure the acceptance of true opinions, such as I have proved mine to be. For the clear perception of these truths will eliminate everything that could fuel doubt and controversy.³⁰

These passages would seem to imply that Descartes' philosophy is safe for society because it is theologically neutral. Since it has no theological consequences, it cannot lead to heresy, atheism, or the social disorder associated with heterodox opinion. However elsewhere, Descartes is quite eager to show that his thought is a positive support for religion, and for the Roman Catholic religion in particular, indeed, a better support than the philosophy commonly taught in the schools. In the Letter to the Faculty of Theology of the University of Paris that introduces the Meditations, for example, Descartes presents his attempts to prove the existence of God and the immortality of the soul in the work that follows as a kind of service to the Church in helping to convert the unbelievers, in accordance with Biblical injunctions, the injunctions of the Councils, and the entreaties of certain unnamed men of the Church (among them almost certainly the Cardinal Bérulle),31 who urged him to use his new method in the service of the Church.

But most interesting and striking is the account of the Eucharist that Descartes gave in the *Fourth Replies*. Arnauld had raised the question of how, on Descartes' view of body as extension, he could explain transubstantiation, how it is that when the priest utters the appropriate words, the host becomes transformed into the body of Christ, and the wine becomes transformed into his blood. There was a standard explanation for what happens at the moment of transformation according to scholastic Aristotelian philosophy, as the form of Christ unites with the host and the wine, leaving the so-called "real accidents" of the host and the wine, by miracle. But if the essence of body is extension, and if, as Descartes wants, there are

³⁰ AT VII 581-2.

³¹ For Watson's somewhat skeptical reflections on the Descartes/Bérulle connection, see *Cogito Ergo Sum*, pp. 142ff.

no forms, how can this be explained? Descartes offers the explanation that at the moment that the priest utters the appropriate formula, the *substance* in the host and the wine change to the very substance of Christ's body and his blood, while the *shape* of the particles that make up the host and the wine remain the same. This allows them to appear unchanged, while in substance they have changed. Descartes was very, very proud of his account. He writes:

All these matters are so neatly and correctly explained by means of my principles that I have no reason to fear that anything here will give the slightest offence to orthodox theologians; on the contrary I am confident that I will receive their hearty thanks for putting forward opinions in physics which are far more in accord with theology than those commonly accepted.³²

Indeed, Descartes suggests, the reason that many have abandoned Catholicism for other, heretical theological views is precisely the implausibility of the scholastic account in terms of real accidents. He argues that "we should prefer opinions that cannot give others any opportunity or pretext for turning away from the true faith." Such as his own, for example.

In this way Descartes offers a kind of double argument for allowing him the freedom to philosophize. On the one hand, he argues that his own philosophy is neutral on theological questions, and is so clear that it could not possibly cause any controversy. On the other hand he argues that his philosophy actually contributes to Catholic theology insofar as it gives arguments that support Catholic positions on the existence of God and the immortality of the soul, and insofar as it gives a more plausible account of transubstantiation and the Eucharist than the school metaphysics does. Unlike Bacon, Descartes does not seem to have any qualms about making his philosophical ideas public: he sees no danger that could come to society from publishing his ideas. He is very much aware of the kinds of considerations that worried Mersenne, the possible disruption that new ideas can cause. However, he thinks that he can answer those worries, that his philosophy does not present any danger of disrupting society. However, like Bacon, it is his philosophical ideas that he is defending. To the best of my knowledge Descartes never offers a general defense of the freedom of philosophizing or the free-

³² AT VII 252.

³³ AT VII 254.

dom of expression. What Descartes offers is not a general defense for freedom of philosophizing, but a defense of freedom for *his* philosophy, and that only within a Catholic context.

Spinoza

I will end with a discussion of Spinoza's views on the freedom of philosophizing. Basic to Spinoza's account of the freedom of philosophizing is his account of the distinction between religion and philosophy, one of the central themes of the *Tractatus Theologico-Politicus*:

To establish, then, how far each person is free, with respect to faith, to think what he wishes, and whom we are bound to consider faithful, even though they think different things, we must determine what faith and its fundamentals are. I have resolved to do that in this Chapter, and at the same time to separate faith from Philosophy, which was the main purpose of my whole work.³⁴

Spinoza begins with a discussion of Scripture. He writes:

[T]he purpose of Scripture is only to teach obedience. No one, in fact, can deny this. For who does not see that neither Testament is anything but an education in obedience? and that neither Testament has any other aim than that men should obey from a true heart? For... Moses did not try to convince the Israelites by reason, but was concerned only to bind them by a covenant, oaths and benefits; and then he threatened the people with punishment if they did not obey the laws and urged them to obedience with rewards. All these things are means, not to knowledge, but to obedience.³⁵

One immediate consequence of this is that we should not look to the Bible for speculative truths; its point is obedience and obedience alone. Spinoza holds that "the faith was formerly written and revealed according to the grasp and opinions of the Prophets and the common people of that time." While the Bible may embody certain assumptions about the physical world, that the earth is immobile, for example, these are not to be taken as assertions of the truth of those speculative

³⁴ Spinoza, *Tractatus Theologico-Politicus* (Amsterdam: 1670), in Spinoza, *Opera*, ed. Carl Gebhardt (4 vols.) (Heidelberg: C. Winter, 1925), vol. III, at pp. 173–4. Further references will be to this edition. I am using the new and as yet unpublished translation by Edwin Curley. I am deeply grateful to him for making it available to me.

 ³⁵ *Ibid.*, p. 174.
 36 *Ibid.*, pp. 178–9.

doctrines, but only as articulations of what would have been generally assumed by contemporaries. Spinoza quickly generalizes this to faith and religion as well. The point of faith and religion is also obedience to God. Spinoza writes that "the Gospel teaching contains nothing but simple faith, viz. to believe in God, and to revere him, or, (what is the same thing), to obey him."37 Furthermore, Spinoza writes, "... everyone, if he is to be saved, is bound to obey this being [i.e. God] and to worship him by practicing Justice and Lovingkindness toward his neighbor."38 In this way, being obedient to God seems to be identified with believing in God and revering him. But most importantly, though, being obedient to God seems to be identified with behaving with "Justice and Lovingkindness" toward others. In this way, Spinoza claims to have shown that "... faith requires piety more than it does truth, and that it is pious and saving only by reason of the person's obedience, and hence that no one is faithful except because he is obedient. So the person who displays the best faith is not necessarily the one who displays the best arguments, but the one who displays the best works of Justice and Lovingkindness."39

In this way, religion is distinguished from philosophy. Spinoza writes: Surely... reason is the domain of truth and wisdom, whereas Theology is the domain of piety and obedience. For... the power of reason does not extend to the point of being able to determine that men can be blessed by obedience alone, without understanding things, whereas Theology teaches nothing beyond this, and does not command anything beyond obedience, and neither wills nor can do anything against reason. For... it determines the tenets of faith only insofar as is sufficient for obedience; but precisely how they are to be understood, with respect to their truth, it leaves to be determined by reason, which is really the light of the mind, without which it sees nothing but dreams and inventions.⁴⁰

It is a short distance from this radical distinction between faith and philosophy to the conclusion that there should be no theological constraints on philosophizing. Spinoza writes:

[T]he goal of Philosophy is nothing but the truth, whereas the goal of Faith, as we have shown abundantly, is nothing but obedience and piety.... Faith, therefore, grants everyone the greatest freedom to phi-

³⁷ *Ibid.*, p. 174.

³⁸ *Ibid.*, p. 177.

³⁹ *Ibid.*, p. 179.

⁴⁰ *Ibid.*, p. 184.

losophize, so that without wickedness he can think whatever he wishes about anything. . . . 41

Religion aims at obedience to God, while philosophy aims toward truth. In this way, the two cannot conflict with one another, Spinoza argues: "Revealed knowledge has nothing in common with natural knowledge, but each prevails in its own domain, without any conflict with the other." As a consequence, religion cannot put any constraints on philosophizing: there can be no conflict between the one and the other. At least not in theory.

But what about the state? Should the state place limits on what can be thought or said? In answering this question, Spinoza appeals to the same distinction between action and the pure pursuit of truth that distinguishes religion from philosophy. The state has the right and the ability to control action, according to Spinoza, but *not* thought and judgment: it can and should control what people do, but not what people think. He writes:

Since the judgment of free men is quite various, since each one thinks that he alone knows everything, and it cannot happen that they should all think alike and speak with one voice, people were not able to live peaceably unless each one surrendered his right to act solely according to the decision of his own mind. Each person, therefore, surrenders only his right to act according to his own decision, but not his right to reason and judge. So no one can act contrary to the decree of the supreme powers without detriment to their right; but everyone, without any infringement of their right, can think, and judge, and hence also speak, provided merely that he only speaks or teaches, and defends his view by reason alone, not with deception, anger, hatred, or any intention to introduce something into the state on the authority of his own decision.⁴³

And so, Spinoza concludes,

If we attend also to the fact that the loyalty of each person to the State, like his loyalty toward God, can be known only from his works, such as lovingkindness towards his neighbor, we will not be able to doubt at all that the best state concedes to everyone the same freedom to philosophize which we have shown that faith does.⁴⁴

⁴¹ Ibid., pp. 179-80.

⁴² *Ibid.*, p. 10.

⁴³ *Ibid.*, p. 241.

⁴⁴ *Ibid.*, p. 243.

There are some marked differences between Spinoza's discussion here and that of his predecessors. First, note the level of generality. Both Bacon and Descartes offer a defense of the freedom of philosophizing, as does Spinoza. But for them, it is an argument for the freedom for them to philosophize. In the case of Spinoza, though, it is a very general argument: it is an argument for the freedom of philosophizing in the most general terms.

But there is an even more basic difference. Spinoza's radical discontinuity between philosophy and religion, between thought and action goes far beyond anything his predecessors tried to establish. For Spinoza, religion and philosophy are not merely distinct realms of intellectual inquiry, like astronomy and psychology, which differ in subject matter, though they agree in seeking truth: religion and philosophy are entirely different domains of discourse, with different goals and different rules of play, as it were. Because of this, because the one has to do with obedience and action, and the other with truth and reason, contradiction is simply inconceivable from the beginning. This is rather different from Descartes' view. As I noted earlier, in the letter to the Doctors of the Sorbonne that begins the Meditations, Descartes notes that there are some truths that we can know from revelation that can also be known through reasoning, in particular, the existence of God and the immortality of the soul. Descartes does, of course, think that we can separate religion from philosophy in the sense that there is a domain of truths that can only be known by revelation, and that it is possible to do philosophy without encroaching on that domain. But for Descartes revelation and philosophy are both domains in which it is appropriate to talk of truth. Not so for Spinoza. Spinoza posits a radical discontinuity between religion and philosophy. For this reason Spinoza sees no need to isolate science from society, as Bacon does. If you remember, one important element of Bacon's New Atlantis that enables science to coexist with a traditional religious society is the fact that the House of Salomon is a kind of secret society: it takes great care to release to the public, and even to the state itself, only those truths that it considers appropriate for those outside of its walls to know. No such caution is needed in Spinoza's conception of society. New scientific discoveries may well alter the beliefs people hold, and, in that way, change the best way for inducing people to come to obey God. But the two domains, that of reason and that of faith are so radically distinct from one another that science could in no way undermine faith. For the same reason, one need not caution Spinoza's philosopher not to stray into theological questions, as Descartes tried hard not to do: as a philosopher, concerned with reason and demonstration, one simply cannot.

But sophisticated as Spinoza's position may be, it still seems fraught with problems. Spinoza's *Tractatus* is written from the point of view of an uninvolved spectator, as it were. From that transcendent point of view, one can make the distinction between religion, which teaches obedience, and philosophy which teaches truth. But if one were to explain this distinction to the participants within a society, those who actually have to live with the distinction between religion and philosophy, the distinction would be seriously undermined. As Spinoza observes,

[F]aith does not require tenets which are true as much as it does tenets which are pious, i.e., tenets which move the heart to obedience, even if there are many among them which have not even a shadow of the truth, so long as the person who accepts them does not know them to be false; otherwise he would necessarily be a rebel.⁴⁵

That is to say, the efficacy that religion has to cause people to behave well toward one another is predicated on their incorrect view that what religion teaches is literally *true*: undermine that belief, and you undermine religion itself, as well as the in-practice distinction that Spinoza wants to draw between religion and philosophy.

But there is an even worse difficulty, the problem of separating thought and its expression from action. Spinoza acknowledges that there is a problem separating the free expression of opinion from action intended to influence the behaviour of others. He notes in one place: "we do not deny that in addition there are certain opinions which, though they seem to be concerned only with truth and falsity, are nevertheless stated and published in a resentful spirit." That is, often the expression of an opinion has ulterior motives, to influence action, and is not a mere neutral expression of some innocent truth believed. In this way, the expression of a belief can cross over the line and become an action. But though he acknowledges the problem of distinguishing between the proper and the improper expression of a belief, I cannot see an answer, in the texts, a way of distinguishing

⁴⁵ *Ibid.*, p. 176, emphasis added.

⁴⁶ *Ibid.*, p. 243.

those expressions that constitute actions from those that don't. But the problem goes even deeper than Spinoza acknowledges. Spinoza worries only about the person who knowingly uses a false or misleading argument to influence the behavior of another. But it doesn't take a bad intention to influence the behavior of another. Despite what Spinoza (or Descartes, or Bacon, or . . .) might hold, one cannot separate belief and its expression from action. An argument or opinion advanced in public, however honestly it may be held, may influence the behavior of some (the weak minded, or the women . . .), and wreak havoc in the world, as did Protestantism in sixteenth-century France.

And this is exactly Mersenne's worry: that the free expression of ideas will lead to the undermining of society because of the weakness of people's understanding. In the end, I think, however strong and attractive Spinoza's argument may be, we must acknowledge that it was not without its problems for those living in seventeenth-century society. However obvious to us the freedom of philosophizing may be, our seventeenth-century ancestors had reason to be cautious.

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